

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
1/7/2000	1/7/2015	7/7/2014	5.950	103.652	103.652	103.652	103.480	102.871	102.269	101.675	101.091
7/2/2004	7/2/2014	7/2/2014	3.990	100.355	100.355	100.355	100.343	100.256	100.170	100.084	99.998
12/13/2004	12/15/2014	6/13/2014	3.320	101.826	101.826	101.826	101.679	101.138	100.609	100.141	99.970
9/1/2005	9/1/2015	6/1/2014	4.130	105.254	105.254	105.254	104.694	103.426	102.179	100.953	99.747
9/30/2005	9/30/2015	6/30/2014	4.440	106.006	106.006	106.006	105.368	104.017	102.690	101.387	100.105
10/26/2005	10/26/2015	7/26/2014	4.540	106.469	106.469	106.469	105.756	104.330	102.931	101.557	100.208
1/17/2006	1/19/2016	7/17/2014	4.080	106.777	106.777	106.777	105.796	104.160	102.631	101.320	100.379
4/24/2006	4/25/2016	7/24/2014	4.440	108.571	108.571	108.571	107.231	105.322	103.539	101.979	100.766
5/5/2006	5/5/2016	8/5/2014	4.350	108.518	108.518	108.518	107.141	105.214	103.427	101.884	100.714
5/5/2006	5/5/2016	8/5/2014	4.530	108.871	108.871	108.871	107.491	105.553	103.743	102.155	100.911
5/15/2006	5/16/2016	8/15/2014	4.350	108.651	108.651	108.651	107.233	105.276	103.461	101.893	100.704
5/15/2006	5/16/2016	8/15/2014	4.520	108.989	108.989	108.989	107.568	105.601	103.764	102.155	100.890
5/19/2006	5/19/2016	8/19/2014	4.510	109.007	109.007	109.007	107.574	105.600	103.756	102.144	100.877
6/12/2006	6/13/2016	6/12/2014	4.620	109.547	109.547	109.547	108.013	105.967	104.057	102.378	101.049
6/26/2006	6/27/2016	6/26/2014	4.730	109.959	109.959	109.959	108.363	106.272	104.313	102.578	101.184
7/24/2006	7/25/2016	7/24/2014	4.660	110.174	110.174	110.174	108.459	106.300	104.290	102.527	101.129
7/28/2006	7/28/2016	7/28/2014	4.490	109.840	109.840	109.840	108.116	105.961	103.969	102.247	100.911
8/25/2006	8/25/2016	8/25/2014	4.350	109.871	109.871	109.871	108.021	105.809	103.787	102.064	100.770
11/24/2006	11/25/2016	8/25/2014	4.190	110.579	110.579	110.579	108.263	105.858	103.710	101.930	100.658
12/1/2006	12/1/2016	6/2/2014	4.090	110.395	110.395	110.395	108.057	105.659	103.536	101.806	100.601
12/4/2006	12/5/2016	6/4/2014	4.080	110.415	110.415	110.415	108.055	105.649	103.522	101.791	100.586
12/5/2006	12/5/2016	6/5/2014	4.260	110.874	110.874	110.874	108.503	106.070	103.895	102.089	100.772
12/8/2006	12/8/2016	6/9/2014	3.990	110.218	110.218	110.218	107.849	105.450	103.340	101.645	100.485
12/12/2006	12/12/2016	6/12/2014	3.990	110.263	110.263	110.263	107.871	105.462	103.344	101.642	100.476
12/12/2006	12/12/2016	6/12/2014	4.050	110.417	110.417	110.417	108.021	105.602	103.468	101.738	100.538
12/19/2006	12/19/2016	6/19/2014	4.190	110.858	110.858	110.858	108.415	105.958	103.771	101.966	100.674
12/28/2006	12/28/2016	6/30/2014	4.250	111.120	111.120	111.120	108.623	106.136	103.914	102.071	100.727
12/28/2006	12/28/2016	6/30/2014	4.400	111.513	111.513	111.513	109.007	106.498	104.238	102.340	100.910
1/12/2007	1/12/2017	7/14/2014	4.420	111.749	111.749	111.749	109.159	106.618	104.335	102.421	100.979
1/16/2007	1/17/2017	7/16/2014	4.790	112.799	112.799	112.799	110.159	107.559	105.184	103.131	101.506
2/2/2007	2/2/2017	8/2/2014	4.690	112.740	112.740	112.735	109.977	107.245	104.596	102.026	99.817
2/20/2007	2/21/2017	8/20/2014	4.850	113.431	113.431	113.367	110.544	107.749	105.040	102.414	99.868
2/20/2007	2/21/2017	8/20/2014	4.390	112.157	112.157	112.093	109.335	106.707	104.364	102.410	100.951
2/23/2007	2/23/2017	8/25/2014	4.250	111.793	111.793	111.723	108.970	106.360	104.048	102.149	100.768
2/23/2007	2/23/2017	8/25/2014	4.350	112.071	112.071	112.000	109.239	106.613	104.276	102.333	100.892
3/16/2007	3/16/2017	6/16/2014	4.090	111.588	111.588	111.451	108.661	106.039	103.748	101.901	100.615
3/21/2007	3/21/2017	6/23/2014	4.220	112.015	112.015	111.862	109.046	106.386	104.045	102.129	100.751
3/23/2007	3/23/2017	6/23/2014	4.290	112.238	112.238	112.079	109.251	106.573	104.206	102.259	100.832
3/23/2007	3/23/2017	6/23/2014	4.290	112.238	112.238	112.079	109.251	106.573	104.206	102.259	100.832
4/9/2007	4/10/2017	7/9/2014	4.150	112.046	112.046	111.828	108.969	106.287	103.941	102.045	100.703
4/12/2007	4/12/2017	7/14/2014	4.250	112.360	112.360	112.135	109.260	106.553	104.172	102.225	100.817
4/13/2007	4/13/2017	7/14/2014	4.450	112.954	112.954	112.725	109.827	107.080	104.641	102.605	101.082
4/27/2007	4/27/2017	7/28/2014	4.250	112.537	112.537	112.262	109.343	106.601	104.192	102.222	100.799
5/18/2007	5/18/2017	8/18/2014	4.190	112.604	112.604	112.261	109.295	106.525	104.106	102.149	100.756
5/22/2007	5/22/2017	8/22/2014	4.750	114.342	114.342	113.981	110.948	108.064	105.471	103.267	101.557
5/29/2007	5/30/2017	8/29/2014	4.250	112.926	112.926	112.543	109.537	106.725	104.267	102.271	100.831
6/1/2007	6/2/2014	6/2/2014	4.500	100.025	100.025	100.025	100.024	100.019	100.013	100.008	100.002
6/7/2007	6/7/2017	6/9/2014	4.820	114.767	114.767	114.350	111.271	108.342	105.710	103.465	101.713
6/8/2007	6/8/2017	6/9/2014	4.490	113.769	113.769	113.349	110.299	107.426	104.885	102.777	101.192
6/11/2007	6/12/2017	6/11/2014	4.490	113.818	113.818	113.384	110.323	107.440	104.891	102.778	101.188
6/18/2007	6/19/2017	6/18/2014	4.500	113.937	113.937	113.476	110.394	107.493	104.926	102.796	101.193
6/19/2007	6/19/2017	6/19/2014	4.650	114.401	114.401	113.939	110.841	107.913	105.301	103.106	101.422
6/22/2007	6/22/2017	6/23/2014	4.500	113.974	113.974	113.502	110.412	107.503	104.931	102.795	101.187
6/28/2007	6/28/2017	6/30/2014	4.500	114.049	114.049	113.554	110.447	107.524	104.940	102.793	101.177
7/13/2007	7/13/2017	7/14/2014	4.290	113.572	113.572	113.025	109.908	107.004	104.472	102.415	100.918
7/20/2007	7/20/2017	7/21/2014	4.290	113.656	113.656	113.083	109.947	107.026	104.481	102.413	100.908
7/27/2007	7/27/2017	7/28/2014	4.250	113.611	113.611	113.015	109.863	106.935	104.392	102.331	100.847
7/30/2007	1/30/2019	7/30/2014	3.990	118.896	118.896	115.579	111.299	107.594	104.563	102.256	100.711

As of: 5/31/2014 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
7/31/2007	7/31/2017	7/31/2014	3.990	112.823	112.823	112.219	109.097	106.235	103.790	101.865	100.555
7/31/2007	7/31/2017	7/31/2014	3.990	112.823	112.823	112.219	109.097	106.235	103.790	101.865	100.555
7/31/2007	7/31/2017	7/31/2014	4.060	113.048	113.048	112.443	109.309	106.430	103.955	101.996	100.631
8/2/2007	8/4/2014	8/4/2014	4.490	100.811	100.811	100.811	100.784	100.606	100.429	100.252	100.076
8/2/2007	8/2/2017	8/4/2014	4.150	113.360	113.360	112.745	109.597	106.693	104.187	102.186	100.777
8/2/2007	8/2/2017	8/4/2014	4.050	113.038	113.038	112.426	109.292	106.415	103.948	101.999	100.666
8/9/2007	8/9/2017	8/11/2014	3.990	112.922	112.922	112.282	109.140	106.263	103.809	101.882	100.589
8/16/2007	8/16/2017	8/18/2014	3.990	113.000	113.000	112.330	109.171	106.278	103.813	101.875	100.576
8/17/2007	8/17/2017	8/18/2014	4.000	113.044	113.044	112.370	109.206	106.308	103.837	101.893	100.587
8/20/2007	8/20/2014	8/20/2014	4.250	100.956	100.956	100.956	100.922	100.700	100.480	100.261	100.043
8/28/2007	8/28/2014	8/28/2014	4.350	101.075	101.075	101.075	101.037	100.794	100.552	100.311	100.072
8/30/2007	9/2/2014	9/2/2014	3.890	101.016	101.016	101.016	100.974	100.717	100.462	100.209	99.956
9/4/2007	9/5/2017	6/4/2014	3.890	112.890	112.890	112.141	108.958	106.065	103.623	101.738	100.496
9/10/2007	9/11/2017	6/10/2014	3.690	112.289	112.289	111.520	108.363	105.522	103.164	101.394	100.284
9/11/2007	9/11/2017	6/11/2014	3.590	111.956	111.956	111.191	108.056	105.249	102.940	101.227	100.220
9/12/2007	9/12/2014	6/12/2014	3.690	101.066	101.066	101.066	101.016	100.732	100.449	100.168	99.985
9/13/2007	9/15/2014	6/13/2014	3.990	101.186	101.186	101.186	101.133	100.841	100.549	100.260	100.027
9/13/2007	9/13/2017	6/13/2014	3.990	113.310	113.310	112.522	109.301	106.360	103.861	101.903	100.581
9/27/2007	9/29/2014	9/29/2014	4.490	101.509	101.509	101.509	101.445	101.113	100.783	100.455	100.129
9/27/2007	9/27/2017	6/27/2014	3.650	112.318	112.318	111.480	108.293	105.435	103.070	101.299	100.228
10/11/2007	10/14/2014	7/11/2014	4.180	101.579	101.579	101.579	101.500	101.127	100.757	100.391	100.070
10/11/2007	10/11/2017	7/11/2014	3.990	113.621	113.621	112.712	109.428	106.441	103.910	101.931	100.597
10/15/2007	10/16/2017	7/15/2014	3.990	113.676	113.676	112.747	109.449	106.452	103.914	101.930	100.594
10/25/2007	10/27/2014	7/25/2014	4.360	101.804	101.804	101.804	101.712	101.304	100.899	100.499	100.138
10/26/2007	10/26/2017	7/28/2014	3.390	111.713	111.713	110.778	107.593	104.790	102.533	100.920	100.043
11/2/2007	11/3/2014	8/4/2014	3.990	101.729	101.729	101.729	101.629	101.202	100.779	100.368	100.038
11/2/2007	11/3/2014	8/4/2014	4.190	101.816	101.816	101.816	101.716	101.289	100.865	100.451	100.094
11/5/2007	11/5/2014	8/5/2014	3.990	101.751	101.751	101.751	101.649	101.216	100.788	100.372	100.038
11/5/2007	11/6/2017	8/5/2014	4.390	115.303	115.303	114.270	110.851	107.706	104.981	102.768	101.149
11/6/2007	11/6/2017	8/6/2014	3.480	112.131	112.131	111.146	107.920	105.074	102.770	101.098	100.132
11/9/2007	11/10/2014	8/11/2014	4.330	101.960	101.960	101.960	101.852	101.406	100.963	100.528	100.145
11/13/2007	11/13/2014	8/13/2014	3.350	101.545	101.545	101.545	101.433	100.979	100.532	100.136	99.862
11/19/2007	11/19/2014	8/19/2014	4.270	102.040	102.040	102.040	101.921	101.450	100.982	100.525	100.125
11/19/2007	11/19/2014	8/19/2014	3.750	101.792	101.792	101.792	101.673	101.202	100.736	100.297	99.962
11/19/2007	11/20/2017	8/19/2014	4.290	115.121	115.121	113.981	110.378	106.863	103.482	100.228	97.096
11/20/2007	11/20/2017	8/20/2014	3.740	113.183	113.183	112.113	108.788	105.817	103.355	101.502	100.330
11/23/2007	11/24/2017	8/19/2014	3.990	114.108	114.108	112.949	109.349	105.842	102.468	99.222	96.098
11/23/2007	11/24/2017	8/24/2014	3.990	114.108	114.108	112.949	109.349	105.842	102.468	99.222	96.098
11/29/2007	11/29/2017	8/29/2014	2.950	110.472	110.472	109.429	106.327	103.687	101.685	100.406	99.785
11/30/2007	11/30/2017	9/2/2014	3.190	111.332	111.332	110.260	107.070	104.313	102.157	100.702	99.929
12/10/2007	12/11/2017	6/10/2014	3.450	112.362	112.362	111.220	107.936	105.052	102.732	101.060	100.158
12/24/2007	12/26/2017	6/24/2014	3.990	114.463	114.463	113.148	109.457	105.865	102.413	99.094	95.902
1/3/2008	1/5/2015	7/3/2014	3.650	102.220	102.220	102.220	102.051	101.452	100.865	100.329	99.996
1/4/2008	1/4/2018	7/7/2014	3.360	112.263	112.263	111.025	107.729	104.855	102.566	100.945	100.078
1/7/2008	1/7/2015	7/7/2014	3.490	102.142	102.142	102.142	101.971	101.367	100.777	100.254	99.957
1/7/2008	1/8/2018	7/7/2014	2.590	109.481	109.481	108.335	105.342	102.875	101.108	100.125	99.850
1/8/2008	1/8/2018	7/8/2014	2.570	109.408	109.408	108.264	105.282	102.826	101.073	100.109	99.844
1/8/2008	1/8/2018	7/8/2014	2.640	109.664	109.664	108.508	105.491	102.992	101.186	100.159	99.853
1/11/2008	1/11/2018	7/11/2014	2.720	109.980	109.980	108.798	105.736	103.183	101.313	100.215	99.853
1/14/2008	1/16/2018	7/14/2014	3.240	111.933	111.933	110.656	107.371	104.535	102.306	100.767	100.012
1/16/2008	1/16/2018	7/16/2014	2.380	108.765	108.765	107.630	104.731	102.389	100.775	100.006	99.784
1/17/2008	1/17/2018	7/17/2014	2.250	108.293	108.293	107.185	104.360	102.104	100.604	99.951	99.761
1/18/2008	1/20/2015	7/18/2014	2.350	101.527	101.527	101.527	101.343	100.713	100.175	99.904	99.769
1/18/2008	1/18/2018	7/18/2014	2.290	108.447	108.447	107.326	104.474	102.189	100.652	99.964	99.762
2/14/2008	2/14/2018	8/14/2014	3.190	112.006	112.006	110.438	106.648	102.977	99.453	96.071	92.822
2/25/2008	2/26/2018	8/25/2014	2.420	109.188	109.188	107.886	104.904	102.496	100.826	99.978	99.620
3/7/2008	3/9/2015	6/9/2014	2.890	102.264	102.264	102.264	102.023	101.253	100.543	100.073	99.969
3/7/2008	3/7/2018	6/9/2014	3.550	113.568	113.568	112.029	108.548	105.506	103.051	101.264	100.227

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
3/14/2008	3/14/2018	6/16/2014	2.400	109.219	109.219	107.858	104.879	102.477	100.823	100.053	99.923
3/17/2008	3/19/2018	6/17/2014	3.300	112.722	112.722	111.160	107.739	104.794	102.477	100.861	100.078
4/14/2008	4/14/2015	7/14/2014	2.750	102.429	102.429	102.429	102.142	101.270	100.414	99.572	98.744
4/28/2008	4/28/2015	7/28/2014	3.250	102.997	102.997	102.997	102.689	101.780	100.923	100.241	99.884
4/28/2008	4/30/2018	7/28/2014	2.150	108.539	108.539	107.089	104.193	101.937	100.492	99.889	99.692
4/30/2008	4/30/2018	7/30/2014	3.740	114.855	114.855	112.880	108.843	104.937	101.194	97.608	94.170
5/2/2008	5/4/2015	8/4/2014	3.990	103.746	103.746	103.746	103.428	102.497	101.595	100.775	100.166
5/5/2008	5/5/2015	8/5/2014	3.170	102.985	102.985	102.985	102.666	101.740	100.880	100.220	99.857
5/19/2008	5/19/2015	8/21/2014	4.700	104.608	104.608	104.608	104.266	103.290	102.332	101.393	100.470
5/23/2008	5/23/2018	8/25/2014	3.270	113.197	113.197	111.344	107.813	104.804	102.455	100.828	99.978
6/24/2008	6/24/2015	6/24/2014	3.830	104.138	104.138	104.138	103.733	102.659	101.626	100.714	100.111
6/30/2008	7/2/2018	6/30/2014	3.690	115.302	115.302	112.981	108.770	104.705	100.817	97.097	93.538
7/10/2008	7/10/2014	7/10/2014	4.800	100.533	100.533	100.533	100.518	100.407	100.297	100.187	100.077
7/11/2008	7/11/2018	7/11/2014	3.750	115.645	115.645	113.273	109.033	104.940	101.026	97.282	93.701
7/14/2008	7/14/2015	7/15/2014	4.900	105.567	105.567	105.567	105.118	103.980	102.859	101.755	100.668
7/14/2008	7/16/2018	7/14/2014	2.500	110.464	110.464	108.581	105.376	102.806	101.016	100.071	99.811
7/14/2008	7/16/2018	7/14/2014	3.250	113.604	113.604	111.501	107.893	104.839	102.467	100.838	100.029
7/17/2008	7/17/2018	7/17/2014	3.750	115.707	115.707	113.303	109.045	104.937	101.009	97.253	93.659
8/15/2008	8/15/2018	8/15/2014	3.830	116.351	116.351	113.988	110.092	106.693	103.920	101.837	100.507
5/11/2010	5/11/2015	5/11/2015	0.225	102.851	102.851	102.851	102.522	101.567	100.558	99.284	97.727
5/24/2010	5/26/2015	8/26/2014	2.250	102.250	102.250	102.250	101.900	100.918	99.955	99.011	98.084
6/15/2010	6/15/2015	8/15/2014	2.280	102.406	102.406	102.406	102.021	100.983	99.963	98.960	97.974
10/8/2010	10/8/2015	10/9/2012	2.250	103.093	103.093	103.093	102.440	101.088	99.760	98.456	97.174
12/27/2011	12/27/2021	12/29/2014	3.550	127.284	123.039	115.125	107.579	99.814	87.415	75.969	65.398
4/27/2012	4/27/2016	4/27/2013	1.430	102.768	102.768	102.768	101.444	99.558	97.716	95.917	94.160
4/30/2012	5/2/2016	4/30/2013	1.380	102.691	102.691	102.691	101.348	99.450	97.596	95.786	94.018
5/15/2012	5/15/2017	8/15/2014	1.950	105.849	105.849	105.509	102.533	99.634	96.832	94.123	91.504
5/15/2012	5/15/2017	11/17/2014	-0.236	106.248	106.248	105.907	103.002	100.791	99.646	99.258	99.031
6/20/2012	6/20/2017	6/22/2015	1.630	105.052	105.052	104.585	101.522	96.793	92.079	87.546	83.184
7/16/2012	7/17/2017	7/16/2014	-0.221	105.246	105.246	104.675	101.560	99.928	99.736	99.610	99.485
7/18/2012	7/18/2018	7/20/2015	-0.222	107.840	107.840	105.447	102.089	100.340	99.467	99.097	98.902
7/19/2012	7/19/2017	7/21/2014	-0.222	105.155	105.155	104.576	101.460	99.899	99.721	99.582	99.444
10/1/2012	10/1/2019	4/1/2015	-0.127	110.014	110.014	104.814	101.258	99.970	99.578	99.455	99.379
10/5/2012	10/5/2017	10/6/2014	-0.120	104.905	104.905	103.991	101.051	99.966	99.749	99.654	99.563
3/8/2013	3/8/2018	3/9/2015	-0.035	105.216	105.216	103.546	100.844	99.973	99.744	99.701	99.684
5/7/2014	5/7/2018	5/7/2015	0.003	105.192	105.192	103.206	100.676	99.770	99.411	99.204	99.031