

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: **3/31/2015** 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
9/1/2005	9/1/2015	6/1/2015	4.130	101.767	101.767	101.767	101.646	101.225	100.807	100.393	99.982
9/30/2005	9/30/2015	6/30/2015	4.440	102.257	102.257	102.257	102.090	101.588	101.090	100.598	100.110
10/26/2005	10/26/2015	4/26/2015	4.540	102.636	102.636	102.636	102.425	101.852	101.286	100.725	100.172
1/17/2006	1/19/2016	4/17/2015	4.080	103.332	103.332	103.332	102.951	102.149	101.369	100.660	100.140
4/24/2006	4/25/2016	4/24/2015	4.440	104.822	104.822	104.822	104.191	103.116	102.078	101.138	100.384
5/5/2006	5/5/2016	5/5/2015	4.350	104.845	104.845	104.845	104.185	103.083	102.027	101.087	100.357
5/5/2006	5/5/2016	5/5/2015	4.530	105.046	105.046	105.046	104.385	103.281	102.216	101.251	100.473
5/15/2006	5/16/2016	5/15/2015	4.350	104.978	104.978	104.978	104.283	103.151	102.067	101.100	100.356
5/15/2006	5/16/2016	5/15/2015	4.520	105.173	105.173	105.173	104.477	103.343	102.250	101.261	100.466
5/19/2006	5/19/2016	5/19/2015	4.510	105.199	105.199	105.199	104.494	103.351	102.251	101.257	100.461
6/12/2006	6/13/2016	6/12/2015	4.620	105.646	105.646	105.646	104.858	103.647	102.482	101.427	100.576
6/26/2006	6/27/2016	6/26/2015	4.730	105.965	105.965	105.965	105.128	103.876	102.670	101.567	100.660
7/24/2006	7/25/2016	4/24/2015	4.660	106.239	106.239	106.239	105.300	103.975	102.706	101.559	100.636
7/28/2006	7/28/2016	4/28/2015	4.490	106.049	106.049	106.049	105.100	103.770	102.505	101.379	100.501
8/25/2006	8/25/2016	5/26/2015	4.350	106.198	106.198	106.198	105.143	103.745	102.431	101.287	100.425
11/24/2006	11/25/2016	5/26/2015	4.190	107.041	107.041	107.041	105.607	103.985	102.500	101.255	100.369
12/1/2006	12/1/2016	6/1/2015	4.090	106.941	106.941	106.941	105.485	103.861	102.388	101.174	100.337
12/4/2006	12/5/2016	6/4/2015	4.080	106.970	106.970	106.970	105.495	103.862	102.383	101.163	100.326
12/5/2006	12/5/2016	6/5/2015	4.260	107.277	107.277	107.277	105.799	104.151	102.642	101.373	100.457
12/8/2006	12/8/2016	6/8/2015	3.990	106.849	106.849	106.849	105.364	103.731	102.262	101.063	100.256
12/12/2006	12/12/2016	6/12/2015	3.990	106.893	106.893	106.893	105.390	103.747	102.268	101.061	100.247
12/12/2006	12/12/2016	6/12/2015	4.050	106.997	106.997	106.997	105.493	103.844	102.354	101.129	100.289
12/19/2006	12/19/2016	6/19/2015	4.190	107.320	107.320	107.320	105.781	104.102	102.572	101.296	100.388
12/28/2006	12/28/2016	6/29/2015	4.250	107.531	107.531	107.531	105.951	104.244	102.684	101.375	100.427
12/28/2006	12/28/2016	6/29/2015	4.400	107.797	107.797	107.797	106.213	104.496	102.914	101.562	100.555
1/12/2007	1/12/2017	4/13/2015	4.420	108.017	108.017	108.017	106.366	104.613	103.003	101.630	100.604
1/16/2007	1/17/2017	4/16/2015	4.790	108.755	108.755	108.755	107.072	105.283	103.611	102.137	100.962
2/2/2007	2/2/2017	5/2/2015	4.690	108.780	108.780	108.780	107.018	105.152	103.327	101.543	99.799
2/20/2007	2/21/2017	5/20/2015	4.390	108.450	108.450	108.450	106.619	104.766	103.076	101.648	100.593
2/20/2007	2/21/2017	5/20/2015	4.850	109.336	109.336	109.336	107.483	105.556	103.674	101.835	100.037
2/23/2007	2/23/2017	5/26/2015	4.250	108.204	108.204	108.204	106.369	104.524	102.853	101.465	100.472
2/23/2007	2/23/2017	5/26/2015	4.350	108.397	108.397	108.397	106.559	104.704	103.015	101.595	100.557
3/16/2007	3/16/2017	6/16/2015	4.090	108.134	108.134	108.134	106.211	104.335	102.662	101.301	100.366
3/21/2007	3/21/2017	6/22/2015	4.220	108.451	108.451	108.451	106.500	104.596	102.883	101.472	100.467
3/23/2007	3/23/2017	6/23/2015	4.290	108.615	108.615	108.615	106.651	104.736	103.004	101.566	100.528
3/23/2007	3/23/2017	6/23/2015	4.290	108.615	108.615	108.615	106.651	104.736	103.004	101.566	100.528
4/9/2007	4/10/2017	4/9/2015	4.150	108.542	108.542	108.531	106.504	104.564	102.834	101.422	100.432
4/12/2007	4/12/2017	4/13/2015	4.250	108.771	108.771	108.758	106.719	104.762	103.005	101.558	100.517
4/13/2007	4/13/2017	4/13/2015	4.450	109.196	109.196	109.182	107.131	105.150	103.351	101.833	100.706
4/27/2007	4/27/2017	4/27/2015	4.250	108.948	108.948	108.919	106.825	104.829	103.037	101.559	100.500
5/18/2007	5/18/2017	5/18/2015	4.190	109.066	109.066	108.997	106.848	104.812	102.999	101.519	100.483
5/22/2007	5/22/2017	5/22/2015	4.750	110.331	110.331	110.253	108.066	105.959	104.025	102.354	101.047
5/29/2007	5/30/2017	5/29/2015	4.250	109.338	109.338	109.243	107.057	104.983	103.128	101.604	100.526
6/7/2007	6/7/2017	6/8/2015	4.820	110.697	110.697	110.585	108.352	106.203	104.228	102.522	101.182
6/8/2007	6/8/2017	6/8/2015	4.490	109.977	109.977	109.863	107.642	105.523	103.610	101.999	100.799
6/11/2007	6/12/2017	6/11/2015	4.490	110.027	110.027	109.904	107.672	105.542	103.620	102.001	100.797
6/18/2007	6/19/2017	6/18/2015	4.500	110.137	110.137	109.999	107.746	105.597	103.656	102.021	100.801
6/19/2007	6/19/2017	6/19/2015	4.650	110.475	110.475	110.337	108.076	105.911	103.940	102.258	100.964
6/22/2007	6/22/2017	6/22/2015	4.500	110.174	110.174	110.030	107.768	105.611	103.664	102.022	100.796
6/28/2007	6/28/2017	6/29/2015	4.500	110.249	110.249	110.092	107.813	105.640	103.679	102.026	100.791
7/13/2007	7/13/2017	4/13/2015	4.290	109.950	109.950	109.758	107.452	105.277	103.341	101.755	100.617
7/20/2007	7/20/2017	4/20/2015	4.290	110.033	110.033	109.825	107.499	105.306	103.356	101.755	100.607
7/27/2007	7/27/2017	4/27/2015	4.250	110.022	110.022	109.797	107.455	105.250	103.295	101.697	100.559
7/30/2007	1/30/2019	4/30/2015	3.990	115.527	115.527	113.590	109.926	106.701	104.027	101.976	100.597
7/31/2007	7/31/2017	4/30/2015	3.990	109.453	109.453	109.220	106.890	104.725	102.844	101.356	100.326
7/31/2007	7/31/2017	4/30/2015	3.990	109.453	109.453	109.220	106.890	104.725	102.844	101.356	100.326
7/31/2007	7/31/2017	4/30/2015	4.060	109.619	109.619	109.386	107.050	104.872	102.970	101.453	100.392
8/2/2007	8/2/2017	5/4/2015	4.150	109.856	109.856	109.617	107.271	105.076	103.147	101.596	100.521

As of: 3/31/2015 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
8/2/2007	8/2/2017	5/4/2015	4.050	109.618	109.618	109.380	107.042	104.863	102.964	101.456	100.434
8/9/2007	8/9/2017	5/11/2015	3.990	109.553	109.553	109.297	106.945	104.760	102.865	101.369	100.374
8/16/2007	8/16/2017	5/18/2015	3.990	109.631	109.631	109.357	106.986	104.784	102.873	101.365	100.365
8/17/2007	8/17/2017	5/18/2015	4.000	109.666	109.666	109.390	107.015	104.809	102.893	101.379	100.372
9/4/2007	9/5/2017	6/4/2015	3.890	109.606	109.606	109.282	106.873	104.653	102.748	101.269	100.315
9/10/2007	9/11/2017	6/10/2015	3.690	109.173	109.173	108.837	106.433	104.243	102.394	101.002	100.153
9/11/2007	9/11/2017	6/11/2015	3.590	108.924	108.924	108.589	106.198	104.031	102.221	100.881	100.095
9/13/2007	9/13/2017	6/15/2015	3.990	109.941	109.941	109.597	107.155	104.895	102.940	101.404	100.381
9/27/2007	9/27/2017	6/29/2015	3.650	109.236	109.236	108.860	106.417	104.198	102.334	100.937	100.088
10/11/2007	10/11/2017	4/13/2015	3.990	110.251	110.251	109.836	107.322	105.005	103.008	101.441	100.383
10/15/2007	10/16/2017	4/15/2015	3.990	110.307	110.307	109.877	107.350	105.020	103.014	101.440	100.378
10/26/2007	10/26/2017	4/27/2015	3.390	108.851	108.851	108.405	105.932	103.729	101.935	100.661	100.033
11/5/2007	11/6/2017	5/5/2015	4.390	111.596	111.596	111.105	108.485	106.039	103.879	102.107	100.819
11/6/2007	11/6/2017	5/6/2015	3.480	109.192	109.192	108.716	106.209	103.968	102.132	100.804	100.077
11/19/2007	11/20/2017	11/19/2012	4.290	111.499	111.499	110.960	108.237	105.573	102.988	100.480	98.047
11/20/2007	11/20/2017	5/20/2015	3.740	110.025	110.025	109.504	106.918	104.576	102.604	101.112	100.200
11/23/2007	11/24/2017	11/23/2011	3.990	110.739	110.739	110.190	107.464	104.799	102.214	99.707	97.274
11/23/2007	11/24/2017	11/23/2011	3.990	110.739	110.739	110.190	107.464	104.799	102.214	99.707	97.274
11/29/2007	11/29/2017	5/29/2015	2.950	107.981	107.981	107.459	105.001	102.893	101.274	100.258	99.835
11/30/2007	11/30/2017	6/1/2015	3.190	108.639	108.639	108.105	105.591	103.390	101.647	100.496	99.930
12/10/2007	12/11/2017	6/10/2015	3.450	109.448	109.448	108.877	106.294	103.998	102.126	100.785	100.045
12/24/2007	12/26/2017	12/24/2012	3.990	111.094	111.094	110.450	107.633	104.882	102.215	99.631	97.126
1/4/2008	1/4/2018	4/6/2015	3.360	109.426	109.426	108.794	106.175	103.870	102.016	100.716	100.079
1/7/2008	1/8/2018	4/7/2015	2.590	107.294	107.294	106.695	104.276	102.282	100.852	100.117	99.970
1/8/2008	1/8/2018	4/8/2015	2.570	107.238	107.238	106.640	104.227	102.243	100.824	100.106	99.965
1/8/2008	1/8/2018	4/8/2015	2.640	107.435	107.435	106.832	104.394	102.374	100.915	100.137	99.967
1/11/2008	1/11/2018	4/13/2015	2.720	107.683	107.683	107.066	104.595	102.533	101.016	100.166	99.949
1/14/2008	1/16/2018	4/14/2015	3.240	109.197	109.197	108.536	105.913	103.625	101.810	100.571	100.012
1/16/2008	1/16/2018	4/16/2015	2.380	106.756	106.756	106.153	103.791	101.893	100.598	100.010	99.922
1/17/2008	1/17/2018	4/17/2015	2.250	106.393	106.393	105.799	103.492	101.665	100.458	99.958	99.911
1/18/2008	1/18/2018	4/20/2015	2.290	106.513	106.513	105.913	103.586	101.735	100.498	99.966	99.898
2/14/2008	2/14/2018	2/14/2012	3.190	109.312	109.312	108.522	105.589	102.734	99.971	97.297	94.709
2/25/2008	2/26/2018	5/26/2015	2.420	107.145	107.145	106.435	103.982	102.006	100.641	99.982	99.746
3/7/2008	3/7/2018	6/8/2015	3.550	110.570	110.570	109.760	106.957	104.477	102.450	100.977	100.119
3/14/2008	3/14/2018	6/15/2015	2.400	107.193	107.193	106.447	103.981	102.004	100.655	99.961	99.651
3/17/2008	3/19/2018	6/17/2015	3.300	109.936	109.936	109.102	106.325	103.909	101.991	100.670	99.963
4/14/2008	4/14/2015	4/14/2015	2.750	100.107	100.107	100.107	100.102	100.063	100.024	99.985	99.946
4/28/2008	4/28/2015	4/28/2015	3.250	100.253	100.253	100.253	100.243	100.165	100.087	100.009	99.932
4/28/2008	4/30/2018	4/28/2015	2.150	106.724	106.724	105.899	103.460	101.584	100.371	99.924	99.847
4/30/2008	4/30/2018	4/30/2013	3.740	111.697	111.697	110.675	107.503	104.421	101.445	98.570	95.792
5/2/2008	5/4/2015	5/4/2015	3.990	100.377	100.377	100.377	100.364	100.270	100.176	100.082	99.988
5/5/2008	5/5/2015	5/5/2015	3.170	100.308	100.308	100.308	100.295	100.198	100.101	100.005	99.908
5/19/2008	5/19/2015	5/19/2015	4.700	100.640	100.640	100.640	100.620	100.485	100.351	100.216	100.083
5/23/2008	5/23/2018	5/26/2015	3.270	110.436	110.436	109.415	106.503	103.991	102.009	100.653	99.980
6/24/2008	6/24/2015	6/24/2015	3.830	100.904	100.904	100.904	100.864	100.630	100.397	100.165	99.934
6/30/2008	7/2/2018	6/30/2011	3.690	112.186	112.186	110.952	107.603	104.355	101.223	98.203	95.290
7/11/2008	7/11/2018	7/11/2012	3.750	112.478	112.478	111.212	107.834	104.559	101.403	98.359	95.423
7/14/2008	7/14/2015	4/14/2015	4.900	101.429	101.429	101.429	101.371	101.082	100.794	100.508	100.224
7/14/2008	7/16/2018	4/14/2015	2.500	108.353	108.353	107.270	104.541	102.359	100.838	100.091	99.937
7/14/2008	7/16/2018	4/14/2015	3.250	110.860	110.860	109.679	106.661	104.079	102.057	100.682	100.041
7/17/2008	7/17/2018	7/17/2013	3.750	112.541	112.541	111.253	107.858	104.568	101.396	98.339	95.391
8/15/2008	8/15/2018	5/15/2015	3.830	113.117	113.117	111.790	108.552	105.685	103.310	101.516	100.382
5/11/2010	5/11/2015	5/11/2015	3.700	100.421	100.421	100.421	100.405	100.292	100.179	100.067	99.954
5/24/2010	5/26/2015	5/26/2015	2.250	100.350	100.350	100.350	100.327	100.174	100.021	99.869	99.717
6/15/2010	6/15/2015	6/15/2015	2.280	100.481	100.481	100.481	100.447	100.238	100.031	99.824	99.618
10/8/2010	10/8/2015	10/9/2012	2.250	101.194	101.194	101.194	101.014	100.494	99.979	99.469	98.964
12/27/2011	12/27/2021	6/29/2015	3.550	124.286	123.431	116.356	109.493	103.077	97.092	91.504	86.286
4/27/2012	4/27/2016	4/27/2013	1.430	101.561	101.561	101.561	100.933	99.866	98.817	97.784	96.766

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
4/30/2012	5/2/2016	4/30/2013	1.380	101.525	101.525	101.525	100.883	99.803	98.739	97.692	96.661
5/15/2012	5/15/2017	5/15/2014	1.950	104.203	104.203	104.140	102.005	99.913	97.874	95.886	93.948
5/15/2012	5/15/2017	11/17/2014	2.510	105.410	105.410	105.347	103.202	101.097	99.045	97.045	95.095
6/20/2012	6/20/2017	6/22/2015	1.630	103.676	103.676	103.536	101.308	98.152	94.130	90.218	86.413
7/16/2012	7/17/2017	7/16/2014	1.720	104.008	104.008	103.805	101.502	99.251	97.061	94.930	92.856
7/18/2012	7/18/2018	7/20/2015	-0.193	108.182	108.182	106.898	103.641	101.202	100.016	99.799	99.737
7/19/2012	7/19/2017	7/21/2014	1.690	103.947	103.947	103.740	101.432	99.177	96.983	94.848	92.770
10/1/2012	10/1/2019	4/1/2015	-0.105	110.275	110.275	107.306	102.798	100.006	99.995	99.992	99.989
10/5/2012	10/5/2017	10/6/2014	1.630	104.160	104.160	103.754	101.236	98.783	96.402	94.090	91.845
3/8/2013	3/8/2018	3/9/2015	1.780	105.305	105.305	104.456	101.512	98.657	95.898	93.229	90.647
5/7/2014	5/7/2018	5/7/2015	0.036	105.361	105.361	104.326	101.329	99.950	99.786	99.684	99.583
10/16/2014	10/16/2018	10/17/2016	0.034	104.695	104.695	103.129	101.236	100.268	99.722	99.462	99.341
10/24/2014	10/24/2018	10/26/2015	0.026	105.165	105.165	103.536	100.971	100.054	99.815	99.756	99.724
10/24/2014	10/24/2018	10/26/2015	0.026	105.165	105.165	103.536	100.971	100.054	99.815	99.756	99.724
2/20/2015	2/20/2019	2/22/2016	0.001	105.251	105.251	103.194	100.870	99.924	99.519	99.339	99.207
3/26/2015	3/26/2019	3/29/2016	0.009	104.690	104.690	102.546	100.542	99.666	99.260	98.996	98.769
3/26/2015	3/26/2020	3/29/2016	0.009	106.246	106.246	102.737	100.551	99.646	99.250	98.991	98.769