

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
8/19/1998	8/19/2013	8/19/2013	5.490	100.290	100.290	100.290	100.284	100.232	100.181	100.130	100.079
8/19/1998	8/19/2013	8/19/2013	5.490	100.290	100.290	100.290	100.284	100.232	100.181	100.130	100.079
12/14/1998	12/16/2013	9/16/2013	4.890	101.874	101.874	101.874	101.794	101.416	101.040	100.667	100.299
12/14/1998	12/16/2013	9/16/2013	5.390	102.066	102.066	102.066	101.986	101.607	101.231	100.857	100.486
12/15/1998	12/16/2013	9/16/2013	4.880	101.871	101.871	101.871	101.791	101.412	101.036	100.663	100.295
1/7/2000	1/7/2015	10/7/2013	5.950	108.677	108.677	108.677	107.947	106.472	105.026	103.619	102.300
7/2/2004	7/2/2014	10/2/2013	3.990	103.724	103.724	103.724	103.386	102.460	101.551	100.658	99.780
12/13/2004	12/15/2014	9/13/2013	3.320	104.629	104.629	104.629	103.965	102.585	101.297	100.327	99.923
9/1/2005	9/1/2015	9/1/2013	4.130	108.741	108.741	108.741	107.330	105.208	103.139	101.122	99.154
9/30/2005	9/30/2015	9/30/2013	4.440	109.755	109.755	109.755	108.237	106.025	103.870	101.770	99.722
10/26/2005	10/26/2015	10/26/2013	4.540	110.303	110.303	110.303	108.686	106.399	104.172	102.004	99.891
1/17/2006	1/19/2016	10/17/2013	4.080	110.222	110.222	110.222	108.266	105.792	103.539	101.693	100.461
4/24/2006	4/25/2016	10/24/2013	4.440	112.320	112.320	112.320	109.907	107.154	104.637	102.516	100.951
5/5/2006	5/5/2016	8/5/2013	4.350	112.191	112.191	112.191	109.731	106.965	104.455	102.366	100.858
5/5/2006	5/5/2016	8/5/2013	4.530	112.696	112.696	112.696	110.230	107.447	104.899	102.739	101.129
5/15/2006	5/16/2016	8/15/2013	4.350	112.324	112.324	112.324	109.808	107.014	104.480	102.369	100.844
5/15/2006	5/16/2016	8/15/2013	4.520	112.806	112.806	112.806	110.285	107.473	104.901	102.724	101.099
5/19/2006	5/19/2016	8/19/2013	4.510	112.815	112.815	112.815	110.279	107.461	104.884	102.705	101.080
6/12/2006	6/13/2016	9/12/2013	4.620	113.449	113.449	113.449	110.780	107.889	105.244	102.992	101.285
6/26/2006	6/27/2016	9/26/2013	4.730	113.953	113.953	113.953	111.206	108.268	105.570	103.252	101.462
7/24/2006	7/25/2016	10/24/2013	4.660	114.109	114.109	114.109	111.212	108.213	105.477	103.149	101.378
7/28/2006	7/28/2016	10/28/2013	4.490	113.631	113.631	113.631	110.726	107.738	105.035	102.770	101.099
8/21/2006	8/21/2013	8/21/2013	4.750	100.277	100.277	100.277	100.270	100.214	100.157	100.101	100.044
8/25/2006	8/25/2016	8/26/2013	4.350	113.545	113.545	113.545	110.487	107.451	104.737	102.502	100.893
10/10/2006	10/10/2013	10/10/2013	4.250	100.838	100.838	100.838	100.811	100.617	100.424	100.231	100.039
10/12/2006	10/15/2013	10/15/2013	4.500	100.950	100.950	100.950	100.920	100.713	100.506	100.300	100.094
11/6/2006	11/6/2013	8/6/2013	4.290	101.168	101.168	101.168	101.125	100.857	100.591	100.326	100.065
11/17/2006	11/18/2013	8/19/2013	4.350	101.329	101.329	101.329	101.277	100.975	100.676	100.378	100.087
11/24/2006	11/25/2016	8/26/2013	4.190	114.117	114.117	113.885	110.491	107.289	104.492	102.255	100.710
11/30/2006	12/2/2013	8/28/2013	4.350	101.498	101.498	101.498	101.434	101.093	100.755	100.420	100.086
12/1/2006	12/1/2016	9/3/2013	4.090	113.848	113.848	113.593	110.194	107.004	104.246	102.076	100.626
12/4/2006	12/5/2016	9/4/2013	4.080	113.860	113.860	113.587	110.178	106.984	104.223	102.055	100.611
12/5/2006	12/5/2016	9/5/2013	4.260	114.471	114.471	114.198	110.773	107.542	104.715	102.442	100.848
12/6/2006	12/6/2013	9/6/2013	4.400	101.564	101.564	101.564	101.495	101.144	100.796	100.449	100.125
12/8/2006	12/8/2016	9/9/2013	3.990	113.587	113.587	113.302	109.893	106.715	103.984	101.865	100.499
12/12/2006	12/12/2016	9/12/2013	3.990	113.632	113.632	113.329	109.910	106.723	103.986	101.862	100.494
12/12/2006	12/12/2016	9/12/2013	4.050	113.837	113.837	113.533	110.109	106.908	104.147	101.988	100.562
12/19/2006	12/19/2016	9/19/2013	4.190	114.396	114.396	114.063	110.607	107.360	104.535	102.284	100.733
12/20/2006	12/20/2013	9/20/2013	4.500	101.775	101.775	101.775	101.690	101.301	100.915	100.532	100.170
12/28/2006	12/28/2016	9/30/2013	4.250	114.709	114.709	114.337	110.851	107.573	104.712	102.413	100.801
12/28/2006	12/28/2016	9/30/2013	4.400	115.228	115.228	114.855	111.356	108.050	105.138	102.757	101.039
1/12/2007	1/12/2017	10/15/2013	4.420	115.481	115.481	115.039	111.502	108.167	105.235	102.840	101.114
1/16/2007	1/17/2017	10/16/2013	4.790	116.844	116.844	116.377	112.793	109.383	106.326	103.750	101.771
1/23/2007	1/23/2014	10/23/2013	4.490	102.195	102.195	102.195	102.071	101.590	101.113	100.641	100.208
1/29/2007	1/29/2014	10/29/2013	4.790	102.421	102.421	102.421	102.290	101.792	101.299	100.811	100.327
2/2/2007	2/2/2017	8/2/2013	4.690	116.701	116.701	116.155	112.492	108.898	105.441	102.116	99.621
2/20/2007	2/21/2017	8/20/2013	4.850	117.526	117.526	116.891	113.159	109.499	105.979	102.595	99.339
2/20/2007	2/21/2017	8/20/2013	4.390	115.864	115.864	115.236	111.595	108.190	105.212	102.798	101.065
2/23/2007	2/23/2017	8/23/2013	4.250	115.382	115.382	114.746	111.117	107.738	104.809	102.469	100.830
2/23/2007	2/23/2017	8/23/2013	4.350	115.744	115.744	115.107	111.465	108.064	105.097	102.701	100.991
3/16/2007	3/16/2017	9/16/2013	4.090	115.041	115.041	114.305	110.646	107.271	104.390	102.138	100.634
3/21/2007	3/21/2017	9/23/2013	4.220	115.578	115.578	114.815	111.126	107.709	104.765	102.425	100.802
3/23/2007	3/23/2017	9/23/2013	4.290	115.860	115.860	115.087	111.384	107.946	104.970	102.588	100.908
3/23/2007	3/23/2017	9/23/2013	4.290	115.860	115.860	115.087	111.384	107.946	104.970	102.588	100.908
4/9/2007	4/10/2017	10/9/2013	4.150	115.550	115.550	114.689	110.962	107.534	104.603	102.300	100.741
4/12/2007	4/12/2017	10/15/2013	4.250	115.948	115.948	115.075	111.330	107.870	104.893	102.526	100.877
4/13/2007	4/13/2017	10/15/2013	4.450	116.711	116.711	115.829	112.056	108.545	105.487	103.004	101.210
4/23/2007	4/23/2014	10/23/2013	4.620	103.413	103.413	103.413	103.177	102.442	101.717	101.008	100.376
4/27/2007	4/27/2017	10/28/2013	4.250	116.125	116.125	115.175	111.391	107.904	104.906	102.521	100.859
5/2/2007	5/2/2014	8/2/2013	4.590	103.506	103.506	103.506	103.258	102.497	101.748	101.019	100.381
5/4/2007	5/5/2014	8/5/2013	4.550	103.513	103.513	103.513	103.261	102.492	101.736	100.999	100.362
5/18/2007	5/18/2017	8/19/2013	4.190	116.142	116.142	115.083	111.262	107.760	104.767	102.409	100.786
5/22/2007	5/22/2017	8/22/2013	4.750	118.352	118.352	117.260	113.351	109.698	106.479	103.801	101.765
5/29/2007	5/30/2017	8/29/2013	4.250	116.515	116.515	115.391	111.532	107.991	104.957	102.552	100.864
6/1/2007	6/2/2014	9/3/2013	4.500	103.825	103.825	103.825	103.533	102.688	101.858	101.054	100.367
6/7/2007	6/7/2017	9/9/2013	4.820	118.837	118.837	117.659	113.702	110.007	106.747	104.028	101.943
6/8/2007	6/8/2017	9/9/2013	4.490	117.560	117.560	116.383	112.468	108.851	105.711	103.164	101.312
6/11/2007	6/12/2017	9/11/2013	4.490	117.610	117.610	116.411	112.486	108.861	105.715	103.164	101.310

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
6/18/2007	6/19/2017	9/18/2013	4.500	117.736	117.736	116.501	112.556	108.914	105.753	103.188	101.318
6/19/2007	6/19/2017	9/19/2013	4.650	118.328	118.328	117.088	113.122	109.440	106.223	103.576	101.596
6/22/2007	6/22/2017	9/23/2013	4.500	117.774	117.774	116.522	112.570	108.922	105.756	103.186	101.311
6/28/2007	6/28/2017	9/30/2013	4.500	117.849	117.849	116.566	112.597	108.937	105.762	103.184	101.303
7/13/2007	7/13/2017	10/15/2013	4.290	117.195	117.195	115.838	111.871	108.249	105.154	102.700	100.979
7/20/2007	7/20/2017	10/21/2013	4.290	117.278	117.278	115.884	111.900	108.264	105.159	102.697	100.968
7/27/2007	7/27/2017	10/28/2013	4.250	117.200	117.200	115.768	111.774	108.139	105.042	102.596	100.893
7/30/2007	1/30/2019	10/30/2013	3.990	122.265	122.214	117.164	112.291	108.137	104.787	102.272	100.648
7/31/2007	7/31/2017	10/31/2013	3.990	116.192	116.192	114.751	110.803	107.252	104.282	102.005	100.536
7/31/2007	7/31/2017	10/31/2013	3.990	116.192	116.192	114.751	110.803	107.252	104.282	102.005	100.536
7/31/2007	7/31/2017	10/31/2013	4.060	116.476	116.476	115.032	111.069	107.494	104.488	102.164	100.628
8/2/2007	8/4/2014	8/2/2013	4.490	104.602	104.602	104.602	104.208	103.190	102.191	101.238	100.444
8/2/2007	8/2/2017	8/2/2013	4.050	116.458	116.458	115.005	111.041	107.470	104.475	102.171	100.658
8/2/2007	8/2/2017	8/2/2013	4.150	116.864	116.864	115.406	111.421	107.817	104.773	102.400	100.793
8/9/2007	8/9/2017	8/9/2013	3.990	116.291	116.291	114.803	110.836	107.272	104.298	102.026	100.564
8/16/2007	8/16/2017	8/16/2013	3.990	116.369	116.369	114.843	110.859	107.283	104.299	102.019	100.548
8/17/2007	8/17/2017	8/19/2013	4.000	116.421	116.421	114.889	110.901	107.319	104.329	102.041	100.561
8/20/2007	8/20/2014	8/20/2013	4.250	104.545	104.545	104.545	104.123	103.059	102.013	100.984	100.161
8/28/2007	8/28/2014	8/28/2013	4.350	104.748	104.748	104.748	104.312	103.224	102.156	101.144	100.331
8/30/2007	9/2/2014	8/30/2013	3.890	104.300	104.300	104.300	103.855	102.756	101.682	100.719	100.094
9/4/2007	9/5/2017	9/4/2013	3.890	116.175	116.175	114.548	110.547	106.986	104.043	101.831	100.463
9/10/2007	9/11/2017	9/10/2013	3.690	115.405	115.405	113.760	109.796	106.307	103.474	101.419	100.237
9/11/2007	9/11/2017	9/11/2013	3.590	114.987	114.987	113.351	109.415	105.968	103.198	101.226	100.146
9/12/2007	9/12/2014	9/12/2013	3.690	104.182	104.182	104.182	103.717	102.592	101.499	100.552	100.017
9/13/2007	9/15/2014	9/13/2013	3.990	104.555	104.555	104.555	104.084	102.948	101.837	100.833	100.136
9/13/2007	9/13/2017	9/13/2013	3.990	116.679	116.679	115.003	110.959	107.344	104.336	102.043	100.565
9/27/2007	9/29/2014	9/27/2010	4.490	105.300	105.300	105.300	104.801	103.621	102.460	101.317	100.192
9/27/2007	9/27/2017	9/27/2013	3.650	115.400	115.400	113.674	109.685	106.186	103.358	101.320	100.165
10/11/2007	10/14/2014	10/11/2013	4.180	105.109	105.109	105.109	104.579	103.360	102.169	101.077	100.275
10/11/2007	10/11/2017	10/11/2013	3.990	116.990	116.990	115.160	111.057	107.404	104.371	102.064	100.583
10/15/2007	10/16/2017	10/15/2013	3.990	117.045	117.045	115.187	111.073	107.412	104.374	102.062	100.577
10/25/2007	10/27/2014	10/25/2013	4.360	105.486	105.486	105.486	104.929	103.672	102.444	101.298	100.406
10/26/2007	10/26/2017	10/28/2013	3.390	114.576	114.576	112.720	108.761	105.354	102.683	100.863	99.969
11/2/2007	11/3/2014	8/2/2013	3.990	105.098	105.098	105.098	104.527	103.254	102.020	100.925	100.164
11/2/2007	11/3/2014	8/2/2013	4.190	105.354	105.354	105.354	104.782	103.508	102.266	101.133	100.300
11/5/2007	11/5/2014	8/5/2013	3.990	105.120	105.120	105.120	104.544	103.267	102.027	100.927	100.163
11/5/2007	11/6/2017	8/5/2013	4.390	119.010	119.010	117.006	112.757	108.919	105.658	103.065	101.224
11/6/2007	11/6/2017	8/6/2013	3.480	115.069	115.069	113.144	109.140	105.684	102.951	101.060	100.122
11/9/2007	11/10/2014	8/9/2013	4.330	105.617	105.617	105.617	105.029	103.733	102.469	101.301	100.402
11/13/2007	11/13/2014	8/13/2013	3.350	104.373	104.373	104.373	103.782	102.489	101.271	100.334	99.977
11/19/2007	11/19/2014	8/19/2013	3.750	104.958	104.958	104.958	104.352	103.037	101.771	100.689	100.067
11/19/2007	11/19/2014	8/19/2013	3.750	104.958	104.958	104.958	104.352	103.037	101.771	100.689	100.067
11/19/2007	11/19/2014	8/19/2013	4.270	105.646	105.646	105.646	105.038	103.717	102.430	101.247	100.350
11/19/2007	11/20/2017	8/19/2013	4.290	118.744	118.744	116.596	112.100	107.748	103.594	99.628	95.839
11/20/2007	11/20/2017	8/20/2013	3.740	116.341	116.341	114.306	110.191	106.589	103.668	101.532	100.267
11/23/2007	11/24/2017	8/23/2013	3.990	117.477	117.477	115.309	110.824	106.490	102.353	98.403	94.631
11/23/2007	11/24/2017	8/23/2013	3.990	117.477	117.477	115.309	110.824	106.490	102.353	98.403	94.631
11/29/2007	11/29/2017	8/29/2013	2.950	112.962	112.962	110.995	107.156	103.975	101.638	100.258	99.917
11/30/2007	11/30/2017	8/30/2013	3.190	114.026	114.026	112.009	108.066	104.739	102.207	100.586	99.935
12/10/2007	12/11/2017	9/10/2013	3.450	115.275	115.275	113.161	109.105	105.625	102.888	101.007	100.065
12/24/2007	12/26/2017	9/24/2013	3.990	117.832	117.832	115.461	110.886	106.470	102.259	98.241	94.408
1/3/2008	1/5/2015	10/3/2013	3.650	105.302	105.302	105.302	104.587	103.146	101.777	100.654	100.022
1/4/2008	1/4/2018	10/4/2013	3.360	115.100	115.100	112.869	108.806	105.354	102.672	100.869	100.010
1/7/2008	1/7/2015	10/7/2013	3.490	105.089	105.089	105.089	104.370	102.926	101.568	100.497	99.950
1/7/2008	1/8/2018	10/7/2013	2.590	111.668	111.668	109.594	105.890	102.944	100.951	100.017	99.727
1/8/2008	1/8/2018	10/8/2013	2.570	111.578	111.578	109.509	105.816	102.886	100.914	100.004	99.719
1/8/2008	1/8/2018	10/8/2013	2.640	111.893	111.893	109.803	106.071	103.086	101.039	100.043	99.734
1/11/2008	1/11/2018	10/11/2013	2.720	112.277	112.277	110.147	106.368	103.319	101.187	100.086	99.742
1/14/2008	1/16/2018	10/15/2013	3.240	114.669	114.669	112.388	108.355	104.958	102.361	100.670	99.917
1/16/2008	1/16/2018	10/16/2013	2.380	110.775	110.775	108.729	105.143	102.362	100.593	99.888	99.646
1/17/2008	1/17/2018	10/17/2013	2.250	110.193	110.193	108.191	104.692	102.024	100.415	99.840	99.613
1/18/2008	1/20/2015	10/18/2013	2.350	103.512	103.512	103.512	102.766	101.343	100.282	99.850	99.629
1/18/2008	1/18/2018	10/18/2013	2.290	110.380	110.380	108.358	104.830	102.126	100.462	99.849	99.616
2/14/2008	2/14/2018	8/14/2013	3.190	114.699	114.699	112.015	107.367	102.902	98.651	94.602	90.745
2/25/2008	2/26/2018	8/26/2013	2.420	111.232	111.232	108.963	105.315	102.476	100.642	99.957	99.887
3/7/2008	3/9/2015	9/9/2013	2.890	104.704	104.704	104.704	103.832	102.244	100.884	100.076	99.876
3/7/2008	3/7/2018	9/9/2013	3.550	116.565	116.565	113.939	109.705	106.085	103.225	101.220	100.139
3/14/2008	3/14/2018	9/16/2013	2.400	111.245	111.245	108.911	105.261	102.437	100.628	99.942	99.787

As of: 7/31/2013 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
3/17/2008	3/19/2018	9/17/2013	3.300	115.509	115.509	112.859	108.707	105.218	102.539	100.763	99.985
4/14/2008	4/14/2015	10/14/2013	2.750	104.751	104.751	104.751	103.782	102.071	100.397	98.758	97.154
4/28/2008	4/28/2015	10/28/2013	3.250	105.741	105.741	105.741	104.730	102.990	101.435	100.337	99.824
4/28/2008	4/30/2018	10/28/2013	2.150	110.355	110.355	107.910	104.407	101.795	100.293	99.784	99.534
4/30/2008	4/30/2018	10/30/2013	3.740	118.013	118.013	114.791	109.883	105.171	100.692	96.433	92.383
5/2/2008	5/4/2015	8/2/2013	3.990	107.115	107.115	107.115	106.081	104.301	102.621	101.201	100.253
5/5/2008	5/5/2015	8/5/2013	3.170	105.662	105.662	105.662	104.630	102.880	101.339	100.290	99.989
5/19/2008	5/19/2015	8/21/2013	4.700	108.577	108.577	108.577	107.493	105.654	103.856	102.097	100.376
5/23/2008	5/23/2018	8/23/2013	3.270	115.958	115.958	112.919	108.694	105.170	102.483	100.714	99.987
6/24/2008	6/24/2015	9/24/2013	3.830	107.372	107.372	107.372	106.187	104.272	102.490	101.035	100.136
6/30/2008	7/2/2018	9/30/2013	3.690	118.418	118.418	114.711	109.634	104.773	100.160	95.781	91.624
7/10/2008	7/10/2014	10/10/2013	4.800	104.586	104.586	104.586	104.235	103.283	102.349	101.432	100.531
7/11/2008	7/11/2018	10/11/2013	3.750	118.811	118.811	115.028	109.921	105.031	100.392	95.990	91.810
7/14/2008	7/14/2015	10/15/2013	4.900	109.704	109.704	109.704	108.446	106.444	104.490	102.582	100.719
7/14/2008	7/16/2018	10/15/2013	2.500	112.575	112.575	109.541	105.720	102.759	100.814	99.957	99.676
7/14/2008	7/16/2018	10/15/2013	3.250	116.348	116.348	112.979	108.700	105.155	102.468	100.719	99.931
7/17/2008	7/17/2018	10/17/2013	3.750	118.874	118.874	115.042	109.918	105.014	100.362	95.948	91.759
8/15/2008	8/15/2018	8/15/2013	3.830	119.585	119.585	115.837	111.245	107.316	104.162	101.841	100.422
9/8/2008	9/9/2013	9/9/2013	2.890	100.321	100.321	100.321	100.308	100.199	100.091	99.983	99.875
5/13/2009	5/13/2014	8/13/2013	4.000	103.178	103.178	103.178	102.914	102.126	101.351	100.621	100.095
9/28/2009	9/30/2013	9/30/2013	2.920	100.495	100.495	100.495	100.473	100.306	100.140	99.975	99.815
5/11/2010	5/11/2015	5/11/2015	3.700	106.670	106.670	106.670	105.617	103.809	101.852	99.245	95.687
5/24/2010	5/26/2015	8/26/2013	2.250	104.150	104.150	104.150	103.064	101.248	99.472	97.736	96.038
6/15/2010	6/15/2015	9/15/2013	2.280	104.332	104.332	104.332	103.186	101.315	99.486	97.700	95.954
10/8/2010	10/8/2015	10/9/2012	2.250	104.993	104.993	104.993	103.473	101.293	99.170	97.101	95.085
12/27/2011	12/27/2021	12/29/2014	3.550	129.683	120.962	112.360	104.127	90.618	78.301	67.072	56.834
4/27/2012	4/27/2016	4/27/2013	1.430	103.975	103.975	103.975	101.619	98.931	96.326	93.803	91.358
4/30/2012	5/2/2016	4/30/2013	1.380	103.856	103.856	103.856	101.476	98.777	96.162	93.629	91.175
5/15/2012	5/15/2017	5/15/2014	-0.185	105.936	105.936	104.877	101.512	100.158	99.950	99.940	99.940
5/15/2012	5/15/2017	11/17/2014	-0.185	106.358	106.358	105.297	101.928	100.309	99.764	99.626	99.603
6/20/2012	6/20/2017	6/22/2015	1.630	106.428	106.428	105.178	100.611	94.991	89.645	84.557	79.716
7/16/2012	7/17/2017	7/16/2014	-0.182	105.245	105.245	103.847	100.799	99.816	99.519	99.314	99.118
7/18/2012	7/18/2018	7/20/2015	-0.184	108.292	108.292	104.512	100.844	99.311	98.668	98.332	98.088
7/19/2012	7/19/2017	7/21/2014	-0.184	105.154	105.154	103.745	100.738	99.799	99.499	99.282	99.074
10/1/2012	10/1/2019	4/1/2015	-0.086	110.293	108.223	102.584	100.166	99.362	99.077	98.898	98.741
10/5/2012	10/5/2017	10/6/2014	-0.076	105.002	105.002	103.159	100.503	99.761	99.504	99.310	99.124
3/8/2013	3/8/2018	3/9/2015	0.004	105.413	105.413	102.642	100.193	99.553	99.360	99.249	99.152