

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
12/14/1998	12/16/2013	12/16/2013	4.890	100.217	100.217	100.217	100.211	100.168	100.125	100.082	100.039
12/14/1998	12/16/2013	12/16/2013	5.390	100.240	100.240	100.240	100.233	100.190	100.147	100.104	100.061
12/15/1998	12/16/2013	12/16/2013	4.880	100.217	100.217	100.217	100.210	100.167	100.124	100.081	100.038
1/7/2000	1/7/2015	1/7/2014	5.950	106.660	106.660	106.660	106.194	105.068	103.961	102.879	101.852
7/2/2004	7/2/2014	1/2/2014	3.990	102.372	102.372	102.372	102.182	101.591	101.007	100.430	99.859
12/13/2004	12/15/2014	12/13/2013	3.320	103.504	103.504	103.504	103.084	102.049	101.088	100.320	99.975
9/1/2005	9/1/2015	12/1/2013	4.130	107.342	107.342	107.342	106.350	104.569	102.827	101.123	99.454
9/30/2005	9/30/2015	12/30/2013	4.440	108.251	108.251	108.251	107.177	105.309	103.482	101.696	99.949
10/26/2005	10/26/2015	1/26/2014	4.540	108.764	108.764	108.764	107.616	105.673	103.776	101.922	100.110
1/17/2006	1/19/2016	1/17/2014	4.080	108.839	108.839	108.839	107.442	105.324	103.384	101.742	100.562
4/24/2006	4/25/2016	1/24/2014	4.440	110.816	110.816	110.816	109.065	106.668	104.458	102.542	101.051
5/5/2006	5/5/2016	2/5/2014	4.350	110.717	110.717	110.717	108.932	106.522	104.316	102.427	100.982
5/5/2006	5/5/2016	2/5/2014	4.530	111.161	111.161	111.161	109.370	106.943	104.703	102.756	101.233
5/15/2006	5/16/2016	2/18/2014	4.350	110.850	110.850	110.850	109.021	106.581	104.348	102.436	100.971
5/15/2006	5/16/2016	2/18/2014	4.520	111.274	111.274	111.274	109.439	106.983	104.718	102.748	101.210
5/19/2006	5/19/2016	2/19/2014	4.510	111.287	111.287	111.287	109.440	106.977	104.706	102.734	101.193
6/12/2006	6/13/2016	12/12/2013	4.620	111.883	111.883	111.883	109.931	107.395	105.055	103.012	101.399
6/26/2006	6/27/2016	12/26/2013	4.730	112.350	112.350	112.350	110.335	107.750	105.356	103.251	101.556
7/24/2006	7/25/2016	1/24/2014	4.660	112.530	112.530	112.530	110.396	107.748	105.310	103.181	101.488
7/28/2006	7/28/2016	1/28/2014	4.490	112.110	112.110	112.110	109.970	107.332	104.921	102.843	101.226
8/25/2006	8/25/2016	2/25/2014	4.350	112.071	112.071	112.071	109.813	107.126	104.692	102.626	101.052
11/24/2006	11/25/2016	2/24/2014	4.190	112.697	112.697	112.697	110.016	107.144	104.587	102.468	100.904
11/30/2006	12/2/2013	12/2/2013	4.350	100.024	100.024	100.024	100.023	100.018	100.013	100.007	100.002
12/1/2006	12/1/2016	3/3/2014	4.090	112.462	112.462	112.462	109.765	106.907	104.383	102.318	100.834
12/4/2006	12/5/2016	12/4/2013	4.080	112.477	112.477	112.477	109.760	106.893	104.366	102.300	100.820
12/5/2006	12/5/2016	12/5/2013	4.260	113.028	113.028	113.028	110.293	107.392	104.808	102.658	101.055
12/6/2006	12/6/2013	12/6/2013	4.400	100.073	100.073	100.073	100.071	100.055	100.039	100.022	100.006
12/8/2006	12/8/2016	12/9/2013	3.990	112.235	112.235	112.235	109.512	106.654	104.153	102.123	100.699
12/12/2006	12/12/2016	12/12/2013	3.990	112.280	112.280	112.280	109.535	106.667	104.157	102.120	100.693
12/12/2006	12/12/2016	12/12/2013	4.050	112.464	112.464	112.464	109.713	106.834	104.302	102.235	100.766
12/19/2006	12/19/2016	12/19/2013	4.190	112.977	112.977	112.977	110.173	107.251	104.658	102.511	100.930
12/20/2006	12/20/2013	12/20/2013	4.500	100.250	100.250	100.250	100.242	100.188	100.134	100.080	100.027
12/28/2006	12/28/2016	12/30/2013	4.250	113.269	113.269	113.269	110.412	107.456	104.825	102.633	100.999
12/28/2006	12/28/2016	12/30/2013	4.400	113.737	113.737	113.737	110.868	107.884	105.208	102.951	101.233
1/12/2007	1/12/2017	1/13/2014	4.420	113.984	113.984	113.984	111.032	108.017	105.318	103.046	101.315
1/16/2007	1/17/2017	1/16/2014	4.790	115.221	115.221	115.221	112.210	109.121	106.314	103.884	101.943
1/23/2007	1/23/2014	1/23/2014	4.490	100.673	100.673	100.673	100.649	100.503	100.358	100.213	100.069
1/29/2007	1/29/2014	1/29/2014	4.790	100.798	100.798	100.798	100.770	100.609	100.447	100.286	100.126
2/2/2007	2/2/2017	2/2/2014	4.690	115.111	115.111	115.111	111.960	108.698	105.551	102.513	99.579
2/20/2007	2/21/2017	2/20/2014	4.850	115.883	115.883	115.883	112.604	109.277	106.067	102.971	99.983
2/20/2007	2/21/2017	2/20/2014	4.390	114.376	114.376	114.376	111.199	108.100	105.343	103.030	101.286
2/23/2007	2/23/2017	2/24/2014	4.250	113.941	113.941	113.941	110.769	107.693	104.975	102.726	101.056
2/23/2007	2/23/2017	2/24/2014	4.350	114.270	114.270	114.270	111.085	107.988	105.238	102.940	101.213
3/16/2007	3/16/2017	12/16/2013	4.090	113.655	113.655	113.628	110.380	107.304	104.614	102.427	100.859
3/21/2007	3/21/2017	12/23/2013	4.220	114.148	114.148	114.112	110.824	107.705	104.958	102.697	101.027
3/23/2007	3/23/2017	12/23/2013	4.290	114.406	114.406	114.367	111.061	107.921	105.148	102.850	101.134
3/23/2007	3/23/2017	12/23/2013	4.290	114.406	114.406	114.367	111.061	107.921	105.148	102.850	101.134
4/9/2007	4/10/2017	1/9/2014	4.150	114.144	114.144	114.050	110.710	107.575	104.832	102.595	100.969
4/12/2007	4/12/2017	1/13/2014	4.250	114.508	114.508	114.406	111.046	107.883	105.099	102.806	101.109
4/13/2007	4/13/2017	1/13/2014	4.450	115.203	115.203	115.098	111.708	108.496	105.644	103.253	101.436
4/23/2007	4/23/2014	1/23/2014	4.620	101.848	101.848	101.848	101.743	101.344	100.948	100.556	100.199
4/27/2007	4/27/2017	1/27/2014	4.250	114.685	114.685	114.524	111.125	107.929	105.117	102.803	101.086
5/2/2007	5/2/2014	2/3/2014	4.590	101.951	101.951	101.951	101.835	101.411	100.991	100.577	100.211
5/4/2007	5/5/2014	2/4/2014	4.550	101.972	101.972	101.972	101.853	101.420	100.992	100.571	100.200
5/18/2007	5/18/2017	2/18/2014	4.190	114.722	114.722	114.477	111.040	107.820	105.009	102.712	101.030
5/22/2007	5/22/2017	2/24/2014	4.750	116.743	116.743	116.478	112.949	109.593	106.583	104.013	101.987
5/29/2007	5/30/2017	2/28/2014	4.250	115.075	115.075	114.782	111.302	108.043	105.190	102.854	101.117
6/1/2007	6/2/2014	3/3/2014	4.500	102.300	102.300	102.300	102.146	101.638	101.135	100.646	100.208

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
6/7/2007	6/7/2017	12/9/2013	4.820	117.204	117.204	116.872	113.295	109.896	106.847	104.237	102.168
6/8/2007	6/8/2017	12/9/2013	4.490	116.038	116.038	115.706	112.171	108.843	105.899	103.436	101.562
6/11/2007	6/12/2017	12/11/2013	4.490	116.088	116.088	115.739	112.192	108.856	105.905	103.436	101.558
6/18/2007	6/19/2017	12/18/2013	4.500	116.212	116.212	115.832	112.265	108.910	105.942	103.457	101.561
6/19/2007	6/19/2017	12/19/2013	4.650	116.752	116.752	116.371	112.781	109.391	106.372	103.817	101.829
6/22/2007	6/22/2017	12/23/2013	4.500	116.249	116.249	115.857	112.281	108.919	105.946	103.454	101.552
6/28/2007	6/28/2017	12/30/2013	4.500	116.324	116.324	115.906	112.314	108.938	105.953	103.451	101.539
7/13/2007	7/13/2017	1/13/2014	4.290	115.741	115.741	115.258	111.672	108.327	105.407	103.009	101.230
7/20/2007	7/20/2017	1/21/2014	4.290	115.824	115.824	115.308	111.705	108.346	105.413	103.005	101.217
7/27/2007	7/27/2017	1/27/2014	4.250	115.759	115.759	115.211	111.598	108.236	105.306	102.908	101.137
7/30/2007	1/30/2019	1/30/2014	3.990	120.913	120.913	117.205	112.627	108.621	105.302	102.721	100.926
7/31/2007	7/31/2017	1/31/2014	3.990	114.840	114.840	114.281	110.717	107.430	104.612	102.353	100.775
7/31/2007	7/31/2017	1/31/2014	3.990	114.840	114.840	114.281	110.717	107.430	104.612	102.353	100.775
7/31/2007	7/31/2017	1/31/2014	4.060	115.100	115.100	114.540	110.960	107.652	104.803	102.505	100.863
8/2/2007	8/4/2014	2/3/2014	4.490	103.080	103.080	103.080	102.850	102.169	101.497	100.854	100.313
8/2/2007	8/2/2017	2/3/2014	4.050	115.085	115.085	114.516	110.939	107.634	104.795	102.518	100.913
8/2/2007	8/2/2017	2/3/2014	4.150	115.458	115.458	114.886	111.287	107.953	105.070	102.737	101.050
8/9/2007	8/9/2017	2/10/2014	3.990	114.939	114.939	114.339	110.758	107.458	104.633	102.382	100.819
8/16/2007	8/16/2017	2/18/2014	3.990	115.017	115.017	114.385	110.785	107.472	104.633	102.373	100.800
8/17/2007	8/17/2017	2/18/2014	4.000	115.066	115.066	114.429	110.824	107.506	104.661	102.394	100.811
8/20/2007	8/20/2014	2/20/2014	4.250	103.105	103.105	103.105	102.854	102.130	101.416	100.712	100.018
8/28/2007	8/28/2014	2/28/2014	4.350	103.274	103.274	103.274	103.014	102.268	101.534	100.835	100.245
8/30/2007	9/2/2014	2/28/2014	3.890	102.982	102.982	102.982	102.716	101.957	101.217	100.533	100.085
9/4/2007	9/5/2017	12/4/2013	3.890	114.857	114.857	114.143	110.524	107.218	104.414	102.207	100.709
9/10/2007	9/11/2017	12/10/2013	3.690	114.154	114.154	113.425	109.842	106.598	103.883	101.804	100.448
9/11/2007	9/11/2017	12/11/2013	3.590	113.771	113.771	113.048	109.493	106.286	103.625	101.613	100.347
9/12/2007	9/12/2014	12/12/2013	3.690	102.931	102.931	102.931	102.652	101.867	101.106	100.437	100.041
9/13/2007	9/15/2014	12/13/2013	3.990	103.203	103.203	103.203	102.919	102.124	101.350	100.634	100.124
9/13/2007	9/13/2017	12/13/2013	3.990	115.327	115.327	114.571	110.907	107.552	104.683	102.402	100.815
9/27/2007	9/29/2014	9/27/2010	4.490	103.779	103.779	103.779	103.476	102.640	101.817	101.008	100.212
9/27/2007	9/27/2017	12/27/2013	3.650	114.163	114.163	113.365	109.753	106.492	103.773	101.699	100.364
10/11/2007	10/14/2014	1/13/2014	4.180	103.692	103.692	103.692	103.368	102.493	101.640	100.850	100.232
10/11/2007	10/11/2017	1/13/2014	3.990	115.638	115.638	114.751	111.028	107.629	104.733	102.431	100.829
10/15/2007	10/16/2017	1/15/2014	3.990	115.693	115.693	114.780	111.047	107.638	104.736	102.429	100.824
10/25/2007	10/27/2014	1/27/2014	4.360	104.009	104.009	104.009	103.665	102.754	101.864	101.027	100.343
10/26/2007	10/26/2017	1/27/2014	3.390	113.427	113.427	112.510	108.933	105.748	103.148	101.242	100.131
11/2/2007	11/3/2014	2/3/2014	3.990	103.746	103.746	103.746	103.393	102.465	101.569	100.757	100.159
11/2/2007	11/3/2014	2/3/2014	4.190	103.934	103.934	103.934	103.580	102.651	101.749	100.919	100.273
11/5/2007	11/5/2014	2/5/2014	3.990	103.768	103.768	103.768	103.412	102.478	101.577	100.760	100.156
11/5/2007	11/6/2017	2/5/2014	4.390	117.522	117.522	116.483	112.616	109.044	105.942	103.393	101.498
11/6/2007	11/6/2017	2/6/2014	3.480	113.890	113.890	112.916	109.299	106.068	103.419	101.459	100.269
11/9/2007	11/10/2014	2/10/2014	4.330	104.149	104.149	104.149	103.784	102.835	101.911	101.050	100.357
11/13/2007	11/13/2014	2/13/2014	3.350	103.238	103.238	103.238	102.870	101.921	101.033	100.321	99.889
11/19/2007	11/19/2014	2/19/2014	3.750	103.687	103.687	103.687	103.309	102.339	101.408	100.590	100.029
11/19/2007	11/19/2014	2/19/2014	4.270	104.199	104.199	104.199	103.820	102.845	101.898	101.021	100.315
11/19/2007	11/20/2017	2/19/2014	4.290	117.290	117.290	116.107	111.962	107.925	104.060	100.357	96.810
11/20/2007	11/20/2017	2/20/2014	3.740	115.073	115.073	114.012	110.276	106.906	104.092	101.927	100.515
11/23/2007	11/24/2017	2/19/2014	3.990	116.125	116.125	114.922	110.784	106.760	102.908	99.218	95.684
11/23/2007	11/24/2017	2/24/2014	3.990	116.125	116.125	114.922	110.784	106.760	102.908	99.218	95.684
11/29/2007	11/29/2017	2/28/2014	2.950	111.963	111.963	110.958	107.488	104.486	102.153	100.605	99.820
11/30/2007	11/30/2017	2/28/2014	3.190	112.945	112.945	111.903	108.330	105.204	102.714	100.942	100.107
12/10/2007	12/11/2017	12/10/2013	3.450	114.106	114.106	112.983	109.302	106.036	103.375	101.412	100.263
12/24/2007	12/26/2017	12/24/2013	3.990	116.480	116.480	115.099	110.869	106.762	102.832	99.071	95.472
1/3/2008	1/5/2015	1/3/2014	3.650	104.065	104.065	104.065	103.608	102.510	101.471	100.589	100.059
1/4/2008	1/4/2018	1/6/2014	3.360	113.962	113.962	112.740	109.052	105.805	103.179	101.273	100.183
1/7/2008	1/7/2015	1/7/2014	3.490	103.907	103.907	103.907	103.446	102.345	101.313	100.466	100.010
1/7/2008	1/8/2018	1/7/2014	2.590	110.791	110.791	109.686	106.356	103.544	101.477	100.258	99.861
1/8/2008	1/8/2018	1/8/2014	2.570	110.707	110.707	109.604	106.287	103.487	101.437	100.236	99.855

As of: 11/30/2013 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
1/8/2008	1/8/2018	1/8/2014	2.640	110.999	110.999	109.881	106.523	103.679	101.570	100.307	99.864
1/11/2008	1/11/2018	1/13/2014	2.720	111.355	111.355	110.206	106.800	103.897	101.722	100.383	99.866
1/14/2008	1/16/2018	1/14/2014	3.240	113.571	113.571	112.305	108.645	105.438	102.879	101.051	100.085
1/16/2008	1/16/2018	1/16/2014	2.380	109.968	109.968	108.871	105.656	102.978	101.078	100.077	99.792
1/17/2008	1/17/2018	1/17/2014	2.250	109.430	109.430	108.361	105.234	102.648	100.859	100.013	99.768
1/18/2008	1/20/2015	1/21/2014	2.350	102.715	102.715	102.715	102.238	101.165	100.333	99.920	99.759
1/18/2008	1/18/2018	1/21/2014	2.290	109.604	109.604	108.521	105.364	102.747	100.921	100.024	99.755
2/14/2008	2/14/2018	2/14/2014	3.190	113.618	113.618	111.954	107.637	103.466	99.482	95.674	92.036
2/25/2008	2/26/2018	2/25/2014	2.420	110.412	110.412	109.153	105.846	103.102	101.143	100.047	99.604
3/7/2008	3/9/2015	12/9/2013	2.890	103.725	103.725	103.725	103.153	101.917	100.852	100.147	99.972
3/7/2008	3/7/2018	12/9/2013	3.550	115.362	115.362	113.814	109.941	106.522	103.728	101.647	100.353
3/14/2008	3/14/2018	12/16/2013	2.400	110.432	110.432	109.116	105.814	103.079	101.135	100.138	99.928
3/17/2008	3/19/2018	12/17/2013	3.300	114.391	114.391	112.823	109.028	105.719	103.071	101.170	100.164
4/14/2008	4/14/2015	1/14/2014	2.750	103.819	103.819	103.819	103.171	101.794	100.443	99.115	97.812
4/28/2008	4/28/2015	1/28/2014	3.250	104.640	104.640	104.640	103.962	102.574	101.327	100.393	99.916
4/28/2008	4/30/2018	1/28/2014	2.150	109.626	109.626	108.189	105.021	102.444	100.715	99.941	99.695
4/30/2008	4/30/2018	1/30/2014	3.740	116.746	116.746	114.607	110.034	105.620	101.410	97.396	93.566
5/2/2008	5/4/2015	2/3/2014	3.990	105.763	105.763	105.763	105.067	103.636	102.288	101.128	100.300
5/5/2008	5/5/2015	2/5/2014	3.170	104.587	104.587	104.587	103.895	102.500	101.266	100.369	99.888
5/19/2008	5/19/2015	2/21/2014	4.700	106.984	106.984	106.984	106.250	104.756	103.290	101.853	100.442
5/23/2008	5/23/2018	2/24/2014	3.270	114.850	114.850	112.952	109.072	105.707	103.034	101.126	100.046
6/24/2008	6/24/2015	12/24/2013	3.830	106.074	106.074	106.074	105.261	103.698	102.244	101.017	100.198
6/30/2008	7/2/2018	12/30/2013	3.690	117.168	117.168	114.593	109.848	105.279	100.930	96.789	92.844
7/10/2008	7/10/2014	1/10/2014	4.800	102.960	102.960	102.960	102.760	102.146	101.539	100.939	100.346
7/11/2008	7/11/2018	1/11/2014	3.750	117.540	117.540	114.899	110.124	105.526	101.150	96.985	93.018
7/14/2008	7/14/2015	1/15/2014	4.900	108.044	108.044	108.044	107.174	105.518	103.896	102.308	100.751
7/14/2008	7/16/2018	1/14/2014	2.500	111.728	111.728	109.823	106.328	103.438	101.362	100.177	99.820
7/14/2008	7/16/2018	1/14/2014	3.250	115.247	115.247	113.066	109.122	105.727	103.039	101.130	100.103
7/17/2008	7/17/2018	1/17/2014	3.750	117.603	117.603	114.917	110.125	105.513	101.123	96.946	92.968
8/15/2008	8/15/2018	2/18/2014	3.830	118.287	118.287	115.766	111.513	107.764	104.665	102.287	100.705
5/13/2009	5/13/2014	2/13/2014	4.000	101.822	101.822	101.822	101.693	101.240	100.791	100.361	100.023
5/11/2010	5/11/2015	5/11/2015	3.700	105.416	105.416	105.416	104.703	103.191	101.476	99.339	96.863
5/24/2010	5/26/2015	2/26/2014	2.250	103.387	103.387	103.387	102.648	101.163	99.707	98.279	96.878
6/15/2010	6/15/2015	12/15/2013	2.280	103.559	103.559	103.559	102.774	101.233	99.724	98.244	96.793
10/8/2010	10/8/2015	10/9/2012	2.250	104.231	104.231	104.231	103.153	101.301	99.491	97.723	95.994
12/27/2011	12/27/2021	12/29/2014	3.550	128.356	120.019	111.780	103.972	91.177	78.955	67.760	57.504
4/27/2012	4/27/2016	4/27/2013	1.430	103.491	103.491	103.491	101.770	99.397	97.091	94.849	92.669
4/30/2012	5/2/2016	4/30/2013	1.380	103.388	103.388	103.388	101.649	99.264	96.947	94.695	92.506
5/15/2012	5/15/2017	5/15/2014	-0.219	105.724	105.724	105.485	102.283	100.473	99.920	99.855	99.855
5/15/2012	5/15/2017	11/17/2014	-0.219	105.911	105.911	105.672	102.877	101.159	100.240	99.921	99.832
6/20/2012	6/20/2017	6/22/2015	1.630	105.876	105.876	105.477	101.907	96.673	91.545	86.646	81.964
7/16/2012	7/17/2017	7/16/2014	-0.204	104.956	104.956	104.430	101.459	100.209	99.905	99.862	99.857
7/18/2012	7/18/2018	7/20/2015	-0.204	107.546	107.546	104.873	101.725	100.313	99.568	99.281	99.176
7/19/2012	7/19/2017	7/21/2014	-0.208	105.149	105.149	104.613	101.490	100.181	99.898	99.848	99.845
10/1/2012	10/1/2019	4/1/2015	-0.112	109.825	108.778	103.124	100.781	99.844	99.489	99.339	99.246
10/5/2012	10/5/2017	10/6/2014	-0.107	104.725	104.725	103.797	101.193	100.151	99.776	99.632	99.527
3/8/2013	3/8/2018	3/9/2015	-0.012	105.078	105.078	103.297	100.948	100.107	99.783	99.686	99.647