

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		Coupon	Next Call							
	Date	Date		-300	-200	-100	Base	+100	+200	+300	+400
2/27/1997	2/27/2012	5/27/2009	6.580	119.429	118.911	115.840	112.794	109.887	107.198	104.834	102.896
4/8/1998	4/8/2013	4/8/2009	5.490	122.402	119.757	115.473	111.467	107.964	105.045	102.793	101.240
8/19/1998	8/19/2013	5/19/2009	5.490	124.430	120.963	116.351	112.090	108.384	105.321	102.968	101.333
8/19/1998	8/19/2013	5/19/2009	5.490	124.430	120.963	116.351	112.090	108.384	105.321	102.968	101.333
8/25/1998	8/19/2013	4/27/2009	5.490	124.430	120.963	116.350	112.089	108.380	105.316	102.957	101.326
8/27/1998	8/19/2013	4/27/2009	5.490	124.430	120.963	116.350	112.089	108.380	105.316	102.957	101.326
9/30/1998	9/30/2013	6/30/2009	5.220	123.838	120.180	115.530	111.276	107.610	104.648	102.445	100.979
12/14/1998	12/16/2013	3/16/2009	5.390	125.767	121.392	116.495	112.047	108.243	105.150	102.801	101.213
12/14/1998	12/16/2013	6/15/2009	5.390	125.767	121.392	116.495	112.047	108.243	105.150	102.801	101.213
12/14/1998	12/16/2013	6/15/2009	4.890	123.377	119.038	114.248	109.978	106.438	103.685	101.729	100.568
12/15/1998	12/16/2013	6/15/2009	4.880	123.329	118.991	114.203	109.938	106.403	103.658	101.711	100.557
4/23/1999	4/27/2009	4/23/2009	5.500	100.412	100.412	100.412	100.394	100.319	100.244	100.169	100.094
4/23/1999	4/27/2009	4/23/2009	5.190	100.389	100.389	100.389	100.371	100.296	100.221	100.146	100.071
4/26/1999	4/27/2009	4/27/2009	5.500	100.412	100.412	100.412	100.394	100.319	100.244	100.169	100.094
4/26/1999	4/27/2009	4/27/2009	5.190	100.389	100.389	100.389	100.371	100.296	100.221	100.146	100.071
5/6/1999	5/6/2009	5/6/2009	5.310	100.531	100.531	100.531	100.499	100.396	100.293	100.191	100.089
6/7/1999	6/8/2009	6/8/2009	5.700	101.092	101.092	101.092	101.026	100.833	100.642	100.451	100.261
6/7/1999	6/8/2009	6/8/2009	6.040	101.158	101.158	101.158	101.091	100.898	100.707	100.516	100.326
7/1/1999	7/1/2009	4/1/2009	6.110	101.561	101.561	101.561	101.435	101.176	100.918	100.662	100.408
7/23/1999	7/23/2009	4/23/2009	5.400	101.710	101.710	101.710	101.569	101.248	100.929	100.612	100.298
9/8/1999	9/8/2009	6/8/2009	5.620	102.513	102.513	102.513	102.200	101.751	101.307	100.867	100.444
10/8/1999	10/8/2009	4/8/2009	5.580	102.960	102.960	102.960	102.546	102.012	101.483	100.961	100.469
11/1/1999	11/2/2009	5/1/2009	5.540	103.324	103.324	103.324	102.803	102.202	101.609	101.025	100.482
11/8/1999	11/9/2009	5/8/2009	5.960	103.692	103.692	103.692	103.165	102.543	101.930	101.325	100.744
11/9/1999	11/9/2009	5/11/2009	5.570	103.450	103.450	103.450	102.924	102.303	101.691	101.087	100.523
12/10/1999	12/10/2009	6/10/2009	5.710	104.029	104.029	104.029	103.375	102.666	101.967	101.281	100.649
12/17/1999	12/17/2009	6/17/2009	5.910	104.285	104.285	104.285	103.626	102.896	102.177	101.470	100.804
12/20/1999	12/21/2009	6/22/2009	5.810	104.277	104.277	104.277	103.615	102.874	102.144	101.427	100.757
12/22/1999	12/22/2009	6/22/2009	5.840	104.315	104.315	104.315	103.653	102.909	102.176	101.456	100.780
1/7/2000	1/7/2015	4/7/2009	5.950	132.843	126.727	120.853	115.617	111.159	107.461	104.539	102.389
1/13/2000	1/13/2010	4/13/2009	5.910	104.728	104.728	104.728	103.932	103.128	102.338	101.563	100.844
1/25/2000	1/25/2010	4/27/2009	5.970	104.975	104.975	104.975	104.171	103.332	102.507	101.699	100.942
1/27/2000	1/27/2010	4/27/2009	6.080	105.100	105.100	105.100	104.294	103.450	102.619	101.804	101.035
1/27/2000	1/27/2010	4/27/2009	6.210	105.210	105.210	105.210	104.403	103.558	102.727	101.911	101.134
2/7/2000	2/8/2010	5/7/2009	5.950	105.190	105.190	105.178	104.253	103.386	102.535	101.703	100.934
2/16/2000	2/8/2010	5/1/2009	5.950	105.190	105.190	105.178	104.253	103.386	102.535	101.703	100.934
2/16/2000	2/16/2010	5/18/2009	6.470	105.787	105.787	105.775	104.843	103.951	103.075	102.216	101.392
2/16/2000	2/16/2010	5/18/2009	6.690	105.984	105.984	105.972	105.039	104.146	103.269	102.408	101.577
3/6/2000	3/8/2010	6/8/2009	6.390	106.071	106.071	105.982	104.968	104.015	103.080	102.169	101.316
3/13/2000	3/15/2010	6/15/2009	6.090	105.904	105.904	105.815	104.798	103.826	102.873	101.948	101.100
3/14/2000	3/15/2010	5/14/2009	6.090	105.904	105.904	105.815	104.798	103.826	102.874	101.955	101.111
3/15/2000	3/15/2010	6/15/2009	5.950	105.768	105.768	105.680	104.662	103.691	102.739	101.818	100.986
3/21/2000	3/22/2010	6/22/2009	6.120	106.052	106.052	105.964	104.941	103.948	102.975	102.030	101.161
3/22/2000	3/22/2010	6/22/2009	5.960	105.894	105.894	105.805	104.783	103.792	102.820	101.879	101.026
4/5/2000	4/5/2010	4/6/2009	5.950	106.115	106.115	105.932	104.838	103.813	102.809	101.843	100.984
4/11/2000	4/12/2010	4/13/2009	6.560	106.870	106.870	106.686	105.584	104.535	103.507	102.505	101.566
4/11/2000	4/12/2010	4/13/2009	6.050	106.336	106.336	106.152	105.053	104.007	102.982	101.994	101.103
4/11/2000	4/12/2010	4/13/2009	5.950	106.231	106.231	106.048	104.948	103.903	102.879	101.894	101.016
4/11/2000	4/12/2010	4/13/2009	6.750	107.069	107.069	106.885	105.782	104.732	103.702	102.698	101.746
4/11/2000	4/12/2010	4/13/2009	6.470	106.776	106.776	106.592	105.490	104.442	103.414	102.413	101.482
4/12/2000	4/12/2010	4/13/2009	5.990	106.273	106.273	106.090	104.990	103.945	102.920	101.934	101.051
4/13/2000	4/13/2010	4/13/2009	6.560	106.888	106.888	106.705	105.601	104.550	103.519	102.514	101.572
4/24/2000	4/26/2010	4/24/2009	6.450	107.005	107.005	106.822	105.710	104.622	103.554	102.515	101.546
5/3/2000	5/3/2010	5/4/2009	6.240	106.899	106.899	106.617	105.436	104.330	103.247	102.209	101.279
5/3/2000	5/3/2010	5/4/2009	6.360	107.031	107.031	106.749	105.567	104.461	103.377	102.334	101.389
5/15/2000	5/17/2010	5/15/2009	6.990	108.000	108.000	107.717	106.522	105.370	104.240	103.141	102.105
5/30/2000	6/1/2010	6/1/2009	6.490	107.698	107.698	107.320	106.054	104.869	103.708	102.587	101.564
8/8/2000	8/9/2010	5/8/2009	5.990	108.253	108.253	107.676	106.234	104.859	103.519	102.267	101.210
8/18/2000	8/18/2010	5/18/2009	6.090	108.543	108.543	107.966	106.516	105.114	103.747	102.461	101.360
10/5/2000	10/5/2010	4/6/2009	5.710	108.771	108.771	107.941	106.331	104.805	103.336	102.012	100.964
10/10/2000	10/12/2010	4/10/2009	5.840	109.084	109.084	108.254	106.637	105.089	103.594	102.233	101.123
10/13/2000	10/13/2010	4/13/2009	5.750	108.960	108.960	108.130	106.514	104.964	103.470	102.119	101.036
10/23/2000	10/25/2010	4/23/2009	5.640	108.977	108.977	108.147	106.524	104.941	103.419	102.051	100.971
12/5/2000	12/6/2010	6/5/2009	5.410	109.242	109.242	108.101	106.322	104.643	103.070	101.718	100.727
12/11/2000	12/13/2010	6/11/2009	5.170	108.933	108.933	107.793	106.013	104.322	102.757	101.454	100.538
12/12/2000	12/13/2010	6/12/2009	5.110	108.829	108.829	107.690	105.910	104.222	102.667	101.380	100.495
12/15/2000	12/15/2010	6/15/2009	5.120	108.875	108.875	107.735	105.954	104.260	102.698	101.402	100.507
12/20/2000	12/20/2010	6/22/2009	4.950	108.649	108.649	107.510	105.729	104.029	102.478	101.220	100.397
12/21/2000	12/21/2010	6/22/2009	4.860	108.505	108.505	107.367	105.586	103.889	102.349	101.120	100.339
1/11/2001	1/11/2011	4/13/2009	5.370	109.711	109.711	108.412	106.542	104.771	103.133	101.748	100.743
1/12/2001	1/12/2011	4/13/2009	5.300	109.599	109.599	108.300	106.431	104.661	103.028	101.661	100.683
2/5/2001	2/7/2011	5/5/2009	4.820	109.078	109.078	107.638	105.702	103.897	102.296	101.062	100.301
2/7/2001	2/7/2011	5/7/2009	4.820	109.078	109.078	107.638	105.702	103.897	102.296	101.062	100.301
2/26/2001	2/28/2011	5/26/2009	5.060	109.825	109.825	108.384	106.427	104.543	102.837	101.458	100.512
2/26/2001	2/28/2011	5/26/2009	5.450	110.582	110.582	109.138	107.174	105.269	103.501	101.996	100.873
2/26/2001	2/28/2011	5/26/2009	4.790	109.301	109.301	107.861	105.911	104.047	102.395	101.118	100.322
2/27/2001	2/28/2011	5/27/2009	4.760	109.242	109.242	107.803	105.854	103.993	102.346	101.082	100.303
2/27/2001	2/28/2011	5/27/2009	5.020	109.747	109.747	108.306	106.351	104.469	102.772	101.405	100.477
3/1/2001	3/1/2011	6/1/2009	5.270	110.247	110.247	108.645	106.618	104.732	103.016	101.607	100.626
3/14/2001	3/14/2011	6/15/2009	4.8								

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
12/5/2002	12/5/2012	6/5/2009	3.790	114.160	112.247	108.499	105.231	102.757	101.121	100.263	99.913
3/6/2003	3/6/2013	6/8/2009	2.990	111.927	109.571	105.869	102.998	101.174	100.258	99.938	99.752
2/5/2004	4/26/2010	4/24/2009	6.200	106.734	106.734	106.550	105.440	104.353	103.288	102.262	101.327
2/5/2004	12/14/2010	6/15/2009	5.820	110.072	110.072	108.929	107.138	105.423	103.790	102.332	101.163
4/1/2004	4/1/2009	4/1/2009	2.770	100.008	100.008	100.008	100.007	100.004	100.001	100.001	100.001
5/24/2004	5/26/2009	5/26/2009	3.580	100.557	100.557	100.557	100.512	100.353	100.195	100.045	99.990
5/28/2004	5/28/2009	5/28/2009	3.700	100.596	100.596	100.596	100.549	100.385	100.222	100.062	99.990
6/11/2004	6/11/2009	6/11/2009	3.750	100.750	100.750	100.750	100.681	100.481	100.282	100.085	99.990
6/18/2004	6/20/2011	6/18/2009	4.120	109.281	109.281	107.219	104.977	102.993	101.448	100.467	99.990
7/2/2004	7/2/2014	7/2/2009	3.990	120.598	115.372	110.548	106.567	103.593	101.585	100.452	99.916
8/5/2004	8/5/2009	5/5/2009	3.470	101.224	101.224	101.224	101.013	100.658	100.308	100.042	99.908
12/13/2004	12/15/2014	6/15/2009	3.320	117.655	112.386	107.830	104.324	101.956	100.599	100.029	99.790
12/17/2004	12/17/2009	6/17/2009	3.710	102.690	102.690	102.690	102.035	101.312	100.627	100.139	99.870
5/5/2005	5/5/2010	5/5/2006	4.190	104.656	104.656	104.375	103.204	102.114	101.123	100.389	100.051
5/17/2005	5/17/2010	5/18/2009	4.070	104.658	104.658	104.377	103.199	102.078	101.070	100.346	99.990
6/6/2005	6/7/2010	6/8/2009	3.890	104.679	104.679	104.303	103.051	101.887	100.885	100.235	99.926
7/18/2005	7/19/2010	4/20/2009	4.160	105.489	105.489	105.014	103.667	102.380	101.239	100.424	100.044
9/1/2005	9/1/2015	6/1/2009	4.130	123.126	117.128	111.807	107.467	104.216	101.976	100.653	100.051
9/19/2005	9/19/2012	6/19/2009	3.820	113.455	112.038	108.494	105.324	102.851	101.176	100.282	99.926
9/26/2005	9/26/2012	6/26/2009	3.890	113.777	112.360	108.807	105.607	103.069	101.319	100.346	99.990
9/30/2005	9/30/2015	6/30/2009	4.440	125.431	119.288	113.766	109.162	105.536	102.892	101.180	100.254
10/26/2005	10/26/2015	4/27/2009	4.540	126.119	119.897	114.288	109.599	105.888	103.152	101.342	100.342
10/28/2005	10/28/2015	4/28/2009	4.140	123.559	117.529	112.175	107.791	104.437	102.103	100.694	100.081
10/28/2005	10/28/2015	4/28/2009	4.310	124.648	118.533	113.065	108.543	105.029	102.515	100.930	100.172
11/4/2005	11/4/2010	5/4/2009	4.520	107.320	107.320	106.341	104.663	103.100	101.723	100.698	100.133
11/21/2005	11/21/2012	5/21/2009	4.290	115.861	114.106	110.356	106.931	104.110	102.038	100.721	100.089
1/6/2006	1/6/2016	4/6/2009	4.020	122.786	116.740	111.406	107.100	103.904	101.741	100.510	100.047
1/17/2006	1/19/2016	4/17/2009	4.080	123.322	117.238	111.861	107.495	104.201	101.939	100.608	100.060
3/20/2006	3/21/2011	6/30/2009	4.760	109.520	109.520	107.922	105.889	103.920	101.998	100.122	100.415
4/11/2006	4/11/2011	4/13/2009	4.980	110.251	110.251	108.495	106.383	104.410	102.663	101.299	100.415
4/19/2006	4/19/2013	4/20/2009	4.630	119.034	116.410	112.232	108.435	105.269	102.847	101.207	100.302
4/24/2006	4/25/2016	4/24/2009	4.440	126.135	119.723	114.004	109.275	105.580	102.893	101.153	100.264
4/28/2006	4/28/2011	4/28/2009	5.090	110.717	110.717	108.961	106.830	104.753	102.728	100.752	100.179
5/5/2006	5/6/2013	5/5/2009	4.780	119.877	117.046	112.774	108.895	105.661	103.155	101.416	100.406
5/5/2006	5/5/2016	5/5/2009	4.980	129.764	122.995	116.873	111.719	107.591	104.421	102.177	100.787
5/5/2006	5/5/2016	5/5/2009	4.350	125.440	119.022	113.330	108.669	105.104	102.562	100.957	100.179
5/5/2006	5/5/2016	5/5/2009	4.530	126.667	120.143	114.320	109.513	105.778	103.046	101.260	100.313
5/9/2006	5/9/2011	5/11/2009	5.050	110.787	110.787	108.870	106.672	104.628	102.828	101.416	100.478
5/15/2006	5/16/2016	5/15/2009	4.350	125.573	119.155	113.463	108.794	105.197	102.625	100.990	100.182
5/15/2006	5/16/2016	5/15/2009	4.520	126.737	120.219	114.403	109.596	105.838	103.085	101.280	100.313
5/19/2006	5/19/2016	5/19/2009	4.510	126.706	120.194	114.385	109.584	105.826	103.075	101.271	100.307
6/12/2006	6/13/2016	6/12/2009	4.620	127.592	120.938	115.006	110.091	106.232	103.373	101.459	100.397
6/26/2006	6/27/2016	6/26/2009	4.730	128.542	121.827	115.820	110.803	106.805	103.802	101.731	100.527
6/28/2006	6/28/2013	6/28/2009	4.950	121.312	118.278	113.904	109.900	106.484	103.778	101.818	100.620
6/28/2006	6/28/2013	6/29/2009	4.950	121.312	118.278	113.904	109.900	106.484	103.778	101.818	100.620
6/30/2006	7/1/2013	6/30/2009	4.890	121.095	117.858	113.416	109.401	106.060	103.449	101.600	100.515
7/14/2006	7/15/2013	4/14/2009	4.890	121.285	118.048	113.607	109.581	106.195	103.541	101.660	100.521
7/19/2006	7/19/2011	4/20/2009	5.250	112.250	112.250	110.010	107.627	105.386	103.395	101.798	100.696
7/20/2006	7/20/2011	4/20/2009	5.300	112.381	112.381	110.140	107.751	105.444	103.199	101.014	100.320
7/24/2006	7/25/2016	4/24/2009	4.660	128.202	121.460	115.457	110.470	106.521	103.578	101.583	100.440
7/28/2006	7/28/2016	4/28/2009	4.490	127.042	120.398	114.522	109.672	105.872	103.093	101.273	100.307
8/1/2006	8/1/2016	8/3/2009	4.890	129.725	122.776	116.566	111.387	107.284	104.167	101.991	100.663
8/11/2006	8/11/2011	5/11/2009	4.790	111.483	111.483	109.087	106.643	104.413	102.532	101.149	100.320
8/21/2006	8/21/2013	5/21/2009	4.750	121.164	117.730	113.244	109.214	105.862	103.281	101.488	100.446
8/25/2006	8/25/2016	5/26/2009	4.350	126.191	119.575	113.764	109.013	105.344	102.715	101.034	100.191
8/28/2006	8/29/2011	5/28/2009	4.890	111.967	111.967	109.569	107.109	104.816	102.858	101.380	100.443
9/22/2006	9/22/2011	6/22/2009	4.790	112.042	112.042	109.488	106.953	104.620	102.655	101.210	100.348
9/29/2006	9/29/2011	6/29/2009	4.590	111.628	111.628	109.078	106.550	104.238	102.336	100.981	100.218
10/10/2006	10/10/2013	4/10/2009	4.250	119.526	115.694	111.190	107.292	104.228	102.040	100.696	100.111
10/12/2006	10/15/2013	4/13/2009	4.500	120.737	116.886	112.315	108.293	105.043	102.629	101.044	100.240
10/20/2006	10/20/2009	4/20/2009	4.930	102.780	102.780	102.780	102.358	101.791	101.230	100.675	100.127
10/30/2006	10/31/2011	4/30/2009	4.850	112.718	112.613	109.964	107.321	104.752	102.259	100.981	100.218
11/3/2006	11/3/2011	5/3/2009	4.690	112.337	112.131	109.394	106.692	104.128	101.639	100.675	100.127
11/6/2006	11/6/2013	5/6/2009	4.290	120.032	115.974	111.402	107.448	104.348	102.128	100.746	100.105
11/10/2006	11/13/2012	5/11/2009	4.390	116.133	114.377	110.615	107.166	104.318	102.194	100.818	100.136
11/17/2006	11/18/2013	5/18/2009	4.350	120.457	116.394	111.804	107.811	104.634	102.327	100.859	100.139
11/24/2006	11/25/2016	5/26/2009	4.190	125.529	118.836	113.042	108.367	104.817	102.336	100.812	100.095
11/30/2006	12/2/2013	6/1/2009	4.350	120.626	116.339	111.698	107.688	104.545	102.271	100.841	100.142
12/1/2006	12/1/2016	6/1/2009	4.090	124.685	118.001	112.254	107.678	104.290	101.973	100.624	100.032
12/4/2006	12/5/2016	6/4/2009	4.080	124.657	117.982	112.243	107.675	104.285	101.969	100.621	100.025
12/5/2006	12/5/2016	12/7/2009	4.260	125.966	119.153	113.265	108.512	104.935	102.416	100.789	99.753
12/6/2006	12/6/2013	12/7/2009	4.400	120.912	116.618	111.957	107.913	104.717	102.382	100.834	99.827
12/8/2006	12/8/2016	6/8/2009	3.990	124.038	117.434	111.778	107.297	103.995	101.777	100.525	99.982
12/11/2006	12/11/2009	6/11/2009	4.690	103.322	103.322	103.322	102.670	101.960	101.263	100.618	100.156
12/12/2006	12/12/2016	6/12/2009	4.050	124.518	117.867	112.155	107.612	104.233	101.933	100.601	100.006
12/12/2006	12/12/2016	6/12/2009	3.990	124.082	117.479	111.822	107.338	104.025	101.796	100.534	99.980
12/13/2006	12/14/2009	6/15/2009	4.830	103.461	103.461	103.461	102.807	102.089	101.381	100.711	100.210
12/19/2006	12/19/2011	6/19/2009	4.490	112.385	112.073	109.251	106.511	104.092	102.172	100.859	100.161
12/19/2006	12/19/2016	6/19/2009	4.190	125.620	118.858	113.029	108.335	104.790	102.314	100.802	100.081
12/20/2006	12/20/2013	6/22/2009	4.500	121.562	117.257	112					

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
1/12/2007	1/12/2017	4/13/2009	4.420	127.388	120.396	114.329	109.397	105.613	102.887	101.139	100.265
1/16/2007	1/17/2017	1/17/2012	4.790	130.221	122.971	116.602	111.304	106.954	103.295	100.113	97.258
1/23/2007	1/23/2014	4/23/2009	4.490	121.939	117.400	112.652	108.511	105.174	102.701	101.077	100.246
1/23/2007	1/23/2017	4/23/2009	4.460	127.822	120.800	114.699	109.723	105.865	103.066	101.247	100.298
1/29/2007	1/29/2014	4/29/2009	4.790	123.484	118.920	114.092	109.816	106.276	103.550	101.642	100.517
2/2/2007	2/2/2017	5/4/2009	4.690	129.493	122.242	115.917	110.724	106.691	103.699	101.668	100.519
2/9/2007	2/9/2012	5/11/2009	4.750	113.788	113.272	110.260	107.346	104.769	102.675	101.186	100.322
2/9/2007	2/9/2017	5/11/2009	4.470	127.911	120.818	114.663	109.666	105.821	103.038	101.235	100.294
2/12/2007	2/13/2012	5/12/2009	4.880	114.220	113.703	110.687	107.758	105.133	102.971	101.393	100.420
2/15/2007	2/15/2012	5/15/2009	4.990	114.568	114.051	111.031	108.094	105.447	103.236	101.585	100.549
2/20/2007	2/21/2017	5/20/2009	4.390	127.455	120.424	114.339	109.405	105.608	102.881	101.130	100.237
2/20/2007	2/21/2017	2/21/2012	4.850	130.520	122.444	115.626	110.342	106.232	102.780	99.775	97.013
2/23/2007	2/23/2017	5/26/2009	4.350	127.178	120.177	114.128	109.228	105.469	102.783	101.066	100.205
2/23/2007	2/23/2017	5/26/2009	4.250	126.424	119.501	113.543	108.738	105.087	102.514	100.909	100.137
2/28/2007	3/1/2010	6/1/2009	4.890	104.550	104.550	104.462	103.459	102.533	101.625	100.735	100.158
3/2/2007	3/2/2012	6/2/2009	4.490	113.308	112.685	109.590	106.641	104.115	102.149	100.831	100.158
3/9/2007	3/10/2014	6/9/2009	4.450	122.312	117.340	112.492	108.309	104.996	102.565	100.993	100.196
3/16/2007	3/16/2017	6/16/2009	4.090	125.292	118.428	112.583	107.931	104.461	102.077	100.670	100.029
3/20/2007	3/20/2012	6/22/2009	4.550	113.713	113.091	109.994	107.026	104.435	102.390	100.988	100.222
3/21/2007	3/21/2017	6/22/2009	4.220	126.235	119.358	113.397	108.602	104.978	102.435	100.864	100.105
3/23/2007	3/23/2017	6/23/2009	4.290	126.878	119.854	113.829	108.966	105.261	102.629	100.975	100.154
3/23/2007	3/23/2017	6/23/2009	4.290	126.878	119.854	113.829	108.966	105.261	102.629	100.975	100.154
3/30/2007	3/30/2012	6/30/2009	4.670	114.205	113.582	110.475	107.417	104.457	101.596	100.000	100.000
4/2/2007	4/2/2012	7/2/2009	4.590	113.999	113.246	110.061	107.025	104.413	102.361	100.959	100.228
4/9/2007	4/9/2009	4/9/2009	4.750	100.119	100.119	100.119	100.113	100.088	100.063	100.037	100.012
4/9/2007	4/10/2017	4/9/2009	4.150	125.812	118.845	112.908	108.175	104.641	102.199	100.732	100.112
4/12/2007	4/12/2017	4/13/2009	4.250	126.595	119.544	113.515	108.678	105.031	102.466	100.883	100.164
4/13/2007	4/13/2017	4/13/2009	4.450	128.134	120.923	114.713	109.684	105.816	103.023	101.219	100.293
4/18/2007	4/20/2009	4/20/2009	4.940	100.274	100.274	100.274	100.261	100.205	100.150	100.094	100.038
4/23/2007	4/23/2012	4/23/2009	4.650	114.454	113.700	110.513	107.460	104.777	102.639	101.150	100.300
4/23/2007	4/23/2014	4/23/2010	4.620	123.555	118.467	113.510	109.199	105.703	103.058	101.162	99.763
4/27/2007	4/27/2012	4/27/2009	4.550	114.193	113.440	110.256	107.209	104.538	102.439	100.997	100.229
4/27/2007	4/27/2017	4/27/2009	4.250	126.772	119.722	113.692	108.844	105.153	102.547	100.924	100.164
5/2/2007	5/2/2014	5/3/2010	4.590	123.338	118.168	113.176	108.871	105.438	102.853	100.985	99.582
5/4/2007	5/5/2014	5/4/2009	4.550	123.170	118.006	113.028	108.743	105.332	102.804	101.145	100.275
5/14/2007	5/16/2011	5/14/2009	4.500	109.700	109.700	107.788	105.606	103.612	101.960	100.786	100.148
5/18/2007	5/18/2017	5/18/2009	4.190	126.349	119.296	113.294	108.489	104.880	102.363	100.822	100.106
5/22/2007	5/22/2012	5/22/2009	4.690	114.956	114.067	110.790	107.659	104.914	102.723	101.189	100.312
5/22/2007	5/22/2012	5/22/2009	4.690	114.956	114.067	110.790	107.659	104.914	102.723	101.189	100.312
5/22/2007	5/22/2012	5/22/2009	4.710	115.020	114.131	110.852	107.719	104.967	102.767	101.219	100.325
5/22/2007	5/22/2017	5/22/2012	4.750	130.740	123.245	116.737	111.317	106.814	102.954	99.544	96.450
5/25/2007	5/25/2012	5/26/2009	4.650	114.867	113.979	110.703	107.575	104.836	102.658	101.143	100.289
5/29/2007	5/30/2017	5/29/2009	4.250	126.950	119.844	113.782	108.911	105.199	102.577	100.933	100.140
6/1/2007	6/1/2010	6/1/2009	4.990	105.919	105.919	105.542	104.286	103.113	101.987	101.006	100.333
6/1/2007	6/2/2014	6/1/2009	4.500	123.103	117.846	112.838	108.549	105.163	102.674	101.061	100.229
6/7/2007	6/7/2012	6/8/2009	4.940	115.973	114.952	111.574	108.349	105.516	103.206	101.520	100.493
6/7/2007	6/7/2017	6/8/2009	4.820	131.296	123.671	117.067	111.641	107.392	104.192	101.974	100.662
6/8/2007	6/9/2014	6/8/2009	4.730	124.398	119.102	114.010	109.591	106.024	103.320	101.473	100.424
6/8/2007	6/8/2017	6/8/2009	4.490	128.728	121.350	115.028	109.920	105.995	103.147	101.298	100.311
6/11/2007	6/12/2017	6/11/2009	4.490	128.777	121.400	115.077	109.967	106.030	103.172	101.311	100.314
6/18/2007	6/19/2017	6/18/2009	4.840	131.615	123.974	117.354	111.902	107.596	104.341	102.073	100.704
6/18/2007	6/19/2017	6/18/2009	4.500	128.943	121.558	115.226	110.100	106.133	103.244	101.353	100.328
6/19/2007	6/19/2017	6/19/2009	4.650	130.118	122.620	116.161	110.884	106.765	103.719	101.652	100.479
6/20/2007	6/20/2012	6/22/2009	4.890	115.988	114.967	111.592	108.363	105.507	103.186	101.500	100.472
6/20/2007	6/20/2012	6/22/2009	4.960	116.216	115.196	111.817	108.579	105.703	103.347	101.611	100.536
6/22/2007	6/22/2017	6/22/2009	4.500	128.981	121.595	115.264	110.136	106.159	103.262	101.363	100.330
6/26/2007	6/26/2012	6/26/2009	5.130	116.858	115.836	112.449	109.184	106.244	103.788	101.929	100.718
6/28/2007	6/28/2017	6/29/2009	4.500	129.056	121.670	115.339	110.206	106.212	103.299	101.383	100.334
7/13/2007	7/13/2012	4/13/2009	4.690	115.633	114.478	111.025	107.760	104.943	102.715	101.171	100.300
7/13/2007	7/13/2017	4/13/2009	4.290	127.376	120.105	113.937	108.993	105.256	102.614	100.966	100.195
7/13/2007	7/13/2017	7/13/2011	4.900	132.193	124.441	117.727	112.192	107.751	104.156	101.171	98.599
7/18/2007	7/18/2017	7/19/2010	4.780	131.306	123.643	117.029	111.606	107.342	104.107	101.708	99.882
7/19/2007	7/19/2012	7/20/2009	4.890	116.381	115.225	111.761	108.460	105.556	103.202	101.503	100.458
7/20/2007	7/20/2017	4/20/2009	4.290	127.460	120.189	114.020	109.071	105.314	102.653	100.986	100.196
7/24/2007	7/24/2012	7/24/2009	4.820	116.214	115.058	111.598	108.303	105.407	103.078	101.413	100.404
7/27/2007	7/27/2012	4/27/2009	4.590	115.478	114.323	110.878	107.620	104.800	102.596	101.081	100.260
7/27/2007	7/28/2014	4/27/2009	4.350	122.815	117.500	112.508	108.259	104.902	102.470	100.923	100.175
7/27/2007	7/27/2017	4/27/2009	4.250	127.229	119.993	113.862	108.949	105.216	102.582	100.940	100.170
7/27/2007	7/27/2017	4/27/2009	4.180	126.680	119.505	113.440	108.601	104.947	102.395	100.829	100.129
7/30/2007	1/30/2019	4/30/2009	3.990	127.367	119.551	113.176	108.227	104.568	102.091	100.648	100.049
7/31/2007	7/31/2017	4/30/2009	4.060	125.785	118.717	112.772	108.058	104.530	102.109	100.679	100.067
7/31/2007	7/31/2017	4/30/2009	3.990	125.239	118.234	112.360	107.724	104.278	101.942	100.591	100.037
7/31/2007	7/31/2017	4/30/2009	3.990	125.239	118.234	112.360	107.724	104.278	101.942	100.591	100.037
8/2/2007	8/4/2014	8/3/2009	4.490	123.477	118.048	112.952	108.613	105.195	102.688	101.066	100.166
8/2/2007	8/2/2017	5/4/2009	4.050	125.524	118.413	112.447	107.746	104.298	101.959	100.610	100.044
8/2/2007	8/2/2017	5/4/2009	4.150	126.306	119.102	113.037	108.223	104.663	102.210	100.741	100.091
8/6/2007	8/6/2012	5/6/2009	4.490	115.266	113.976	110.449	107.159	104.400	102.289	100.895	100.180
8/6/2007	8/6/2012	5/6/2009	4.490	115.266	113.976	110.449	107.159	104.400	102.289	100.895	100.180
8/9/2007	8/11/2014	8/9/2011	4.860	125.571	120.067	114.829	110.266	106.468	103.278	100.538	98.087
8/9/2007	8/9/2017	5/11/2009	3.990	125.137	118.079	112.174	107.536	104.138	101.852	1	

Start Date	Maturity		Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Next Call Date									
8/17/2007	8/17/2017	5/18/2009	4.000	125.303	118.237	112.321	107.666	104.233	101.912	100.578	100.014
8/20/2007	8/20/2010	8/20/2009	4.590	106.464	106.464	105.890	104.453	103.066	101.788	100.777	100.103
8/20/2007	8/20/2014	8/20/2009	4.250	122.342	116.944	111.922	107.684	104.388	102.017	100.626	99.924
8/20/2007	8/20/2014	8/20/2009	4.250	122.342	116.944	111.922	107.684	104.388	102.017	100.626	99.924
8/24/2007	8/24/2010	5/26/2009	4.460	106.331	106.331	105.757	104.318	102.924	101.653	100.670	100.113
8/24/2007	8/24/2012	5/26/2009	4.050	113.972	112.685	109.195	106.002	103.411	101.563	100.463	99.987
8/28/2007	8/28/2014	8/28/2009	4.350	123.011	117.614	112.578	108.303	104.929	102.485	100.927	100.062
8/30/2007	8/30/2012	8/31/2009	4.390	115.219	113.929	110.410	107.124	104.338	102.228	100.839	100.045
8/30/2007	9/2/2014	6/1/2009	3.890	120.383	115.030	110.179	106.217	103.308	101.387	100.356	99.947
8/31/2007	8/31/2012	8/31/2009	4.370	115.161	113.872	110.354	107.071	104.292	102.196	100.820	100.040
9/4/2007	9/4/2012	6/4/2009	4.190	114.584	113.164	109.578	106.299	103.645	101.719	100.556	100.029
9/4/2007	9/4/2012	6/4/2009	4.220	114.688	113.268	109.680	106.392	103.722	101.773	100.588	100.042
9/4/2007	9/5/2017	6/4/2009	3.890	124.469	117.434	111.602	107.059	103.781	101.619	100.440	99.956
9/6/2007	9/7/2010	6/8/2009	4.160	106.067	106.067	105.397	103.891	102.478	101.245	100.400	99.993
9/7/2007	9/7/2012	6/8/2009	4.090	114.270	112.850	109.275	106.022	103.417	101.562	100.468	99.990
9/10/2007	9/11/2017	6/10/2009	3.690	122.979	116.151	110.539	106.218	103.172	101.243	100.267	99.887
9/11/2007	9/13/2010	9/11/2009	4.430	106.534	106.534	105.864	104.351	102.909	101.603	100.614	99.960
9/11/2007	9/11/2017	6/11/2009	3.590	122.207	115.490	109.984	105.787	102.862	101.061	100.195	99.858
9/12/2007	9/12/2014	6/12/2009	3.690	119.410	114.113	109.375	105.569	102.827	101.086	100.220	99.878
9/13/2007	9/15/2014	9/14/2009	3.990	121.088	115.692	110.788	106.742	103.699	101.637	100.430	99.753
9/13/2007	9/13/2017	9/13/2010	3.990	125.338	118.211	112.271	107.609	104.161	101.668	99.786	98.210
9/13/2007	9/13/2017	9/13/2010	3.990	125.338	118.211	112.271	107.609	104.161	101.668	99.786	98.210
9/14/2007	9/14/2011	6/15/2009	4.090	110.191	110.191	107.651	105.174	103.036	101.422	100.431	99.979
9/14/2007	9/14/2012	9/14/2010	4.390	115.402	113.980	110.377	107.039	104.246	102.037	100.263	98.738
9/17/2007	9/17/2012	9/17/2009	4.220	114.840	113.420	109.832	106.535	103.827	101.843	100.604	99.876
9/27/2007	9/27/2010	6/29/2009	4.250	106.434	106.434	105.764	104.243	102.769	101.459	100.518	100.020
9/27/2007	9/29/2014	9/27/2010	4.490	123.976	118.226	112.589	107.801	104.414	102.096	100.363	98.848
9/27/2007	9/27/2017	6/29/2009	3.650	122.832	116.048	110.478	106.196	103.152	101.229	100.254	99.997
9/28/2007	9/28/2010	6/29/2009	4.290	106.506	106.506	105.837	104.314	102.835	101.513	100.555	100.037
9/28/2007	9/28/2012	6/29/2009	3.850	113.657	112.240	108.692	105.505	102.987	101.263	100.319	99.997
10/3/2007	10/3/2012	7/3/2009	3.830	113.639	112.054	108.436	105.227	102.771	101.127	100.244	99.997
10/9/2007	10/9/2012	10/9/2009	4.400	115.742	114.150	110.429	106.819	103.573	101.461	100.433	99.836
10/11/2007	10/14/2014	4/13/2009	4.180	122.242	116.739	111.705	107.507	104.285	102.031	100.671	100.092
10/11/2007	10/11/2017	4/13/2009	3.990	125.426	118.252	112.285	107.606	104.177	101.871	100.556	100.049
10/15/2007	10/16/2017	4/15/2009	3.990	125.482	118.308	112.341	107.657	104.214	101.895	100.566	100.045
10/22/2007	10/22/2012	4/22/2009	3.990	114.419	112.832	109.192	105.914	103.298	101.467	100.409	100.005
10/25/2007	10/27/2014	10/25/2011	4.360	123.403	117.849	112.727	108.363	104.739	101.658	99.940	96.447
10/26/2007	10/26/2017	4/27/2009	3.390	120.895	114.360	109.072	105.097	102.394	100.799	100.103	99.939
10/29/2007	10/29/2009	4/29/2009	4.250	102.503	102.503	102.503	102.075	101.484	100.899	100.361	100.038
10/29/2007	10/29/2012	10/29/2009	3.990	114.497	112.910	109.270	105.986	103.351	101.500	100.362	99.629
11/2/2007	11/3/2014	11/2/2009	3.990	121.189	115.696	110.732	106.661	103.634	101.591	100.361	99.584
11/2/2007	11/3/2014	11/2/2010	4.190	122.312	116.753	111.680	107.461	104.211	101.738	99.780	98.101
11/5/2007	11/5/2014	11/5/2009	3.990	121.211	115.719	110.754	106.682	103.649	101.600	100.365	99.583
11/5/2007	11/6/2017	11/5/2012	4.390	128.718	121.111	114.663	109.315	104.809	100.851	97.266	93.951
11/6/2007	11/6/2017	5/6/2009	3.480	121.492	114.819	109.398	105.311	102.534	100.879	100.126	99.907
11/8/2007	11/9/2009	5/8/2009	4.100	102.540	102.540	102.540	102.016	101.398	100.791	100.260	99.978
11/9/2007	11/10/2014	11/9/2011	4.330	123.183	117.582	112.438	108.075	104.474	101.402	98.675	96.168
11/13/2007	11/14/2011	5/13/2009	3.760	110.006	109.800	107.090	104.522	102.432	100.983	100.209	99.929
11/13/2007	11/13/2012	5/13/2009	3.680	113.524	111.779	108.113	104.922	102.522	100.965	100.186	99.919
11/13/2007	11/13/2014	5/13/2009	3.350	117.704	112.479	107.923	104.394	102.007	100.625	100.051	99.877
11/19/2007	11/19/2014	11/19/2009	3.750	120.011	114.608	109.784	105.891	103.055	101.221	100.131	99.392
11/19/2007	11/19/2014	11/19/2009	3.750	120.011	114.608	109.784	105.891	103.055	101.221	100.131	99.392
11/19/2007	11/19/2014	11/21/2011	4.270	122.951	117.368	112.254	107.920	104.330	101.260	98.528	96.013
11/19/2007	11/20/2017	11/19/2012	4.290	127.314	119.536	113.183	108.115	103.851	100.105	96.658	93.427
11/20/2007	11/20/2017	11/22/2010	3.740	123.668	116.705	110.984	106.563	103.326	100.930	99.015	97.350
11/23/2007	11/24/2017	11/23/2011	3.990	124.722	116.634	110.601	106.307	103.016	100.198	97.629	95.208
11/23/2007	11/24/2017	11/23/2011	3.990	124.722	116.634	110.601	106.307	103.016	100.198	97.629	95.208
11/29/2007	11/29/2017	5/29/2009	2.950	117.658	111.647	106.893	103.502	101.386	100.305	99.942	99.772
11/30/2007	11/30/2017	11/30/2009	3.190	119.486	113.160	108.094	104.371	101.915	100.506	99.662	98.984
12/6/2007	12/6/2017	12/7/2009	3.250	119.827	113.372	108.214	104.417	101.939	100.496	99.614	98.913
12/7/2007	12/7/2012	12/7/2009	3.450	112.909	111.005	107.324	104.219	102.001	100.617	99.745	99.045
12/10/2007	12/10/2010	12/10/2009	3.870	106.654	106.654	105.521	103.774	102.208	100.957	100.059	99.334
12/10/2007	12/11/2017	12/10/2010	3.450	121.417	114.722	109.315	105.230	102.303	100.092	98.259	96.600
12/11/2007	12/11/2012	12/11/2009	3.760	114.110	112.198	108.453	105.186	102.709	101.057	100.026	99.264
12/14/2007	12/14/2010	6/15/2009	3.690	106.386	106.386	105.253	103.512	101.964	100.797	100.154	99.871
12/20/2007	12/20/2012	12/21/2009	3.600	113.600	111.691	107.977	104.782	102.404	100.865	99.886	99.131
12/20/2007	12/20/2012	12/21/2009	3.750	114.167	112.245	108.386	104.725	102.078	100.753	99.939	99.230
12/24/2007	12/26/2017	12/24/2012	3.990	124.950	117.550	111.552	106.690	102.552	98.820	95.368	92.117
12/26/2007	12/26/2012	6/26/2009	3.460	113.129	111.224	107.541	104.417	102.138	100.732	100.086	99.264
12/26/2007	12/26/2012	12/27/2010	3.960	115.026	113.109	109.329	105.960	103.214	101.007	99.131	97.432
1/2/2008	1/2/2013	1/4/2010	3.490	113.311	111.237	107.479	104.315	102.059	100.629	99.692	98.926
1/3/2008	1/5/2015	1/3/2011	3.650	119.509	114.046	109.234	105.393	102.521	100.291	98.412	96.697
1/4/2008	1/4/2018	1/4/2011	3.360	120.725	114.103	108.790	104.803	101.948	99.758	97.898	96.202
1/7/2008	1/7/2013	4/7/2009	2.990	111.445	109.396	105.791	102.963	101.161	100.249	99.995	99.976
1/7/2008	1/7/2013	1/7/2011	3.590	113.742	111.665	107.883	104.639	102.106	100.052	98.248	96.569
1/7/2008	1/7/2015	1/7/2011	3.490	118.612	113.227	108.527	104.823	102.083	99.940	98.100	96.407
1/7/2008	1/8/2018	4/7/2009	2.590	114.970	109.412	105.128	102.270	100.705	100.077	99.985	99.963
1/8/2008	1/8/2013	1/8/2010	3.150	112.066	110.007	106.346	103.398	101.434	100.243	99.401	98.647
1/8/2008	1/8/2018	4/8/2009	2.570	114.826	109.299	105.044	102.217	100.679	100.071	99.985	99.963
1/8/2008	1/8/2018	4/8/2009	2.640	115.331	109						

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
1/16/2008	1/16/2015	4/16/2009	2.640	113.865	109.027	105.054	102.309	100.754	100.093	99.973	99.929
1/16/2008	1/16/2018	4/16/2009	2.380	113.530	108.306	104.334	101.793	100.488	100.028	99.962	99.917
1/17/2008	1/17/2018	4/17/2009	2.250	112.635	107.626	103.848	101.515	100.373	100.003	99.953	99.906
1/18/2008	1/18/2013	4/20/2009	2.550	109.839	107.827	104.429	101.997	100.628	100.068	99.965	99.915
1/18/2008	1/20/2015	4/20/2009	2.350	112.269	107.693	104.034	101.672	100.452	100.022	99.950	99.895
1/18/2008	1/18/2018	4/20/2009	2.290	112.917	107.840	104.004	101.606	100.409	100.010	99.952	99.903
1/24/2008	1/24/2012	7/24/2009	2.440	106.974	106.560	103.821	101.725	100.520	100.002	99.679	99.364
1/24/2008	1/24/2013	1/25/2010	2.500	109.688	107.682	104.314	101.927	100.557	99.658	98.855	98.072
1/25/2008	1/25/2013	4/25/2009	2.250	108.725	106.653	102.798	101.416	100.582	99.658	98.855	98.072
1/25/2008	1/25/2013	1/25/2011	2.650	110.276	108.199	104.608	102.012	100.031	98.252	96.540	94.871
1/28/2008	1/28/2010	4/28/2009	2.630	102.214	102.214	102.214	101.416	100.582	99.658	98.855	98.072
1/28/2008	1/28/2013	1/28/2011	2.990	111.619	109.537	105.790	102.891	100.731	98.885	97.146	95.461
1/30/2008	1/30/2013	2/1/2010	2.670	110.391	108.367	104.904	102.342	100.774	99.741	98.843	97.975
2/7/2008	2/7/2013	2/8/2010	2.490	109.746	107.597	104.194	101.814	100.473	99.563	98.737	97.931
2/13/2008	2/13/2013	2/14/2011	2.920	111.477	109.283	105.651	102.762	100.544	98.638	96.858	95.144
2/14/2008	2/14/2018	2/14/2012	3.190	117.961	111.476	106.790	103.272	100.282	97.518	94.892	92.368
2/15/2008	2/16/2010	5/16/2009	2.350	102.102	102.102	102.090	101.172	100.298	100.030	99.858	99.701
2/19/2008	2/19/2013	2/19/2010	2.590	110.223	107.994	104.129	101.666	100.538	99.654	98.802	97.964
2/22/2008	2/22/2011	5/22/2009	2.500	104.813	104.813	103.389	101.482	100.570	100.030	99.858	99.701
2/25/2008	2/25/2013	2/25/2011	3.090	112.248	110.011	106.176	103.167	100.905	98.972	97.163	95.418
2/25/2008	2/26/2018	5/26/2009	2.420	113.915	108.615	104.569	101.957	100.570	100.030	99.858	99.701
3/7/2008	3/9/2015	3/7/2011	2.890	115.350	110.251	106.003	102.825	100.444	98.430	96.572	94.791
3/7/2008	3/7/2018	3/7/2013	3.550	122.445	115.494	109.704	104.834	100.606	96.762	93.191	89.829
3/10/2008	3/11/2013	3/10/2010	2.390	109.567	107.290	103.928	101.646	100.319	99.341	98.431	97.542
3/11/2008	3/11/2011	6/11/2009	2.090	104.122	104.122	102.597	101.049	100.226	99.951	99.753	99.556
3/12/2008	3/12/2013	6/12/2009	2.010	108.051	105.871	102.835	101.010	100.194	99.934	99.734	99.534
3/14/2008	3/14/2018	3/15/2010	2.400	113.760	108.445	104.422	101.838	100.383	99.359	98.435	97.537
3/17/2008	3/18/2013	3/17/2011	2.690	110.820	108.496	104.933	102.158	99.963	98.016	96.170	94.381
3/17/2008	3/17/2015	3/17/2011	2.620	113.383	107.669	104.158	101.741	99.745	97.861	96.033	94.251
3/17/2008	3/19/2018	3/18/2013	3.300	120.571	113.916	108.388	103.699	99.563	95.777	92.235	88.887
3/25/2008	3/27/2023	3/25/2013	3.150	120.391	113.215	107.529	102.915	98.851	95.122	91.616	88.288
3/26/2008	3/26/2018	3/26/2012	2.980	116.297	110.407	106.054	102.620	99.588	96.761	94.057	91.455
3/28/2008	3/28/2013	3/28/2011	2.800	111.340	108.940	105.188	102.381	100.195	98.237	96.368	94.554
3/28/2008	3/28/2013	3/28/2011	2.820	111.421	109.021	105.255	102.433	100.239	98.277	96.407	94.592
3/28/2008	3/28/2018	6/29/2009	2.020	111.230	106.565	103.145	101.155	100.239	99.341	98.431	97.542
3/28/2008	3/28/2018	3/28/2011	2.770	116.564	110.671	106.096	102.795	100.327	98.246	96.333	94.504
3/31/2008	3/31/2011	6/30/2009	1.990	104.035	104.035	102.525	101.021	100.220	99.341	98.431	97.542
4/14/2008	4/14/2015	4/14/2011	2.750	114.115	108.324	104.592	102.026	99.924	97.960	96.065	94.220
4/28/2008	4/28/2015	4/28/2011	3.250	117.639	112.284	107.710	104.153	101.417	99.149	97.109	95.185
4/28/2008	4/30/2018	4/28/2009	2.150	112.108	107.231	103.594	101.396	100.335	99.992	99.909	99.826
4/30/2008	4/30/2018	4/30/2013	3.740	123.329	116.249	110.362	105.471	101.187	97.274	93.618	90.165
5/2/2008	5/4/2015	5/2/2011	3.990	122.298	116.939	112.105	108.011	104.172	100.139	96.172	92.626
5/5/2008	5/5/2015	5/5/2011	3.170	117.007	111.692	107.171	103.679	101.012	98.770	96.731	94.801
5/8/2008	5/8/2015	5/10/2010	2.960	115.801	110.637	106.309	103.153	101.135	99.768	98.648	97.598
5/19/2008	5/19/2015	5/21/2012	4.700	126.303	120.336	114.911	109.905	104.821	99.329	93.901	88.970
5/19/2008	5/21/2018	5/20/2013	3.890	124.639	117.302	111.169	106.106	101.677	97.676	93.948	90.433
5/23/2008	5/23/2013	5/23/2011	4.040	116.990	114.316	110.391	106.891	103.425	99.584	95.785	92.331
5/23/2008	5/23/2018	5/23/2011	3.270	120.498	113.868	108.589	104.613	101.609	99.164	97.004	94.991
5/27/2008	5/27/2010	5/27/2009	2.790	103.270	103.270	102.990	101.813	100.670	100.082	99.914	99.754
5/27/2008	5/27/2011	5/27/2010	3.220	107.039	107.039	105.142	103.031	101.349	100.060	98.923	97.829
5/27/2008	5/28/2013	5/27/2011	3.490	114.726	111.914	107.799	104.403	101.728	99.465	97.383	95.400
5/29/2008	5/29/2018	5/31/2011	3.460	120.489	112.365	107.289	104.000	101.538	99.354	97.307	95.331
6/6/2008	6/6/2013	6/6/2011	3.990	116.934	114.077	110.036	106.529	103.304	100.040	96.720	93.509
6/10/2008	6/11/2012	6/10/2010	3.940	112.782	111.845	108.566	105.492	102.611	99.936	97.662	95.806
6/16/2008	6/17/2013	6/16/2011	4.070	117.399	114.376	110.061	106.299	103.276	100.758	98.522	96.442
6/24/2008	6/24/2015	6/24/2011	3.830	121.239	115.492	110.445	106.343	103.098	100.435	98.109	95.972
6/30/2008	7/1/2013	6/30/2009	2.920	112.596	109.523	105.698	102.821	101.055	100.209	99.928	99.757
6/30/2008	7/1/2013	6/30/2010	3.450	114.883	111.736	107.662	104.347	102.006	100.373	99.100	97.961
6/30/2008	6/30/2015	6/30/2010	3.370	118.511	113.020	108.318	104.691	102.150	100.395	99.029	97.809
6/30/2008	7/2/2018	6/30/2011	3.690	122.403	113.920	108.280	104.608	101.950	99.705	97.621	95.629
7/1/2008	7/1/2015	7/1/2011	4.600	125.841	119.461	113.964	109.404	105.332	101.250	97.051	92.866
7/7/2008	7/8/2013	7/7/2011	4.590	119.889	116.801	112.536	108.698	105.068	101.292	97.272	93.166
7/8/2008	7/8/2013	7/8/2011	4.250	118.416	115.343	111.174	107.494	104.108	100.716	97.189	93.631
7/10/2008	7/10/2014	7/10/2012	4.800	125.101	119.847	114.828	110.112	105.387	100.416	95.281	89.993
7/11/2008	7/11/2018	7/11/2012	3.750	123.158	115.642	109.874	105.473	101.815	98.547	95.502	92.616
7/14/2008	7/14/2015	7/15/2013	4.900	127.878	122.008	116.134	110.362	104.487	98.371	92.112	85.804
7/14/2008	7/16/2018	7/14/2009	2.500	114.605	109.077	104.863	102.107	100.629	100.027	99.714	99.421
7/14/2008	7/16/2018	7/14/2011	3.250	120.418	113.752	108.459	104.464	101.407	98.859	96.584	94.454
7/17/2008	7/17/2018	7/17/2013	3.750	123.628	116.423	110.365	105.264	100.808	96.726	92.916	89.323
7/21/2008	7/22/2013	7/21/2009	3.000	113.117	109.917	105.525	101.768	100.510	100.170	99.858	99.548
8/15/2008	8/15/2018	8/15/2011	3.830	125.291	117.863	111.810	107.098	103.452	100.493	97.937	95.622
8/19/2008	8/19/2013	8/19/2010	3.440	115.308	111.893	107.458	103.971	101.743	100.169	98.794	97.483
9/8/2008	9/9/2013	9/8/2009	2.890	113.029	109.604	105.717	102.827	101.054	100.162	99.659	99.222