

## **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
2/27/1997	2/27/2012	11/28/2008	6.580	119.534	115.821	112.262	108.910	105.888	103.347	101.439	100.313
4/8/1998	4/8/2013	10/8/2008	5.490	119.433	114.594	110.162	106.321	103.286	101.195	100.180	99.870
8/19/1998	8/19/2013	11/19/2008	5.490	120.648	115.455	110.725	106.669	103.489	101.299	100.182	99.870
8/19/1998	8/19/2013	11/19/2008	5.490	120.648	115.455	110.725	106.669	103.489	101.299	100.182	99.870
8/25/1998	8/19/2013	10/27/2008	5.490	120.647	115.454	110.720	106.660	103.473	101.282	100.197	99.845
8/27/1998	8/19/2013	10/27/2008	5.490	120.647	115.454	110.720	106.660	103.473	101.282	100.197	99.845
9/30/1998	9/30/2013	9/30/2008	5.220	119.698	114.461	109.730	105.770	102.773	100.842	100.060	99.905
10/30/1998	10/30/2008	10/30/2003	4.990	100.832	100.744	100.574	100.404	100.235	100.067	99.900	99.733
11/25/1998	11/25/2008	11/25/2003	5.200	101.242	101.077	100.838	100.599	100.362	100.126	99.891	99.658
12/14/1998	12/16/2013	9/15/2008	4.890	118.389	113.017	108.321	104.555	101.874	100.392	99.979	99.934
12/14/1998	12/16/2013	12/15/2008	5.390	120.997	115.510	110.589	106.444	103.256	101.130	100.056	99.584
12/15/1998	12/16/2013	9/15/2008	4.880	118.336	112.967	108.277	104.519	101.850	100.383	99.978	99.934
1/15/1999	1/15/2009	1/15/2004	5.160	101.964	101.584	101.201	100.821	100.444	100.070	99.699	99.331
1/19/1999	1/20/2009	1/21/2003	4.980	101.964	101.580	101.182	100.789	100.398	100.011	99.626	99.245
1/19/1999	1/20/2009	1/21/2003	4.980	101.964	101.580	101.182	100.789	100.398	100.011	99.626	99.245
1/29/1999	1/29/2009	1/29/2003	4.980	102.089	101.695	101.272	100.854	100.438	100.026	99.618	99.212
2/18/1999	2/18/2009	11/18/2008	5.080	102.387	101.893	101.425	100.960	100.502	100.122	99.618	99.212
2/18/1999	2/18/2009	11/18/2008	5.430	102.554	102.059	101.590	101.125	100.665	100.245	99.618	99.212
4/23/1999	4/27/2009	10/23/2008	5.190	103.368	102.693	102.030	101.377	100.734	100.205	99.936	99.775
4/23/1999	4/27/2009	10/23/2008	5.500	103.574	102.898	102.235	101.580	100.935	100.344	99.996	99.824
4/26/1999	4/27/2009	10/27/2008	5.190	103.368	102.693	102.030	101.377	100.734	100.205	99.936	99.775
4/26/1999	4/27/2009	10/27/2008	5.500	103.574	102.898	102.235	101.580	100.935	100.344	99.996	99.824
5/6/1999	5/6/2009	11/6/2008	5.310	103.546	102.805	102.117	101.439	100.774	100.227	99.928	99.738
6/7/1999	6/8/2009	9/8/2008	5.700	104.298	103.468	102.691	101.926	101.174	100.479	100.080	99.985
6/7/1999	6/8/2009	9/8/2008	6.040	104.563	103.732	102.954	102.188	101.434	100.708	100.184	99.992
7/1/1999	7/1/2009	10/1/2008	6.110	104.963	104.051	103.207	102.378	101.565	100.787	100.211	99.949
7/23/1999	7/23/2009	10/23/2008	5.400	104.693	103.761	102.858	101.970	101.104	100.362	99.981	99.819
9/8/1999	9/8/2009	9/8/2008	5.620	105.523	104.434	103.406	102.396	101.412	100.543	100.082	99.983
10/8/1999	10/8/2009	10/8/2008	5.580	105.893	104.718	103.605	102.512	101.451	100.535	100.045	99.877
11/1/1999	11/2/2009	11/3/2008	5.540	106.180	104.928	103.750	102.594	101.473	100.526	100.014	99.791
11/8/1999	11/9/2009	11/10/2008	5.960	106.795	105.532	104.330	103.151	101.999	100.940	100.219	99.869
11/9/1999	11/9/2009	11/10/2008	5.570	106.324	105.064	103.866	102.690	101.548	100.574	100.029	99.781
12/10/1999	12/10/2009	9/10/2008	5.710	106.930	105.581	104.294	103.031	101.804	100.736	100.139	99.982
12/17/1999	12/17/2009	9/17/2008	5.910	107.303	105.945	104.636	103.351	102.099	100.963	100.231	99.978
12/20/1999	12/21/2009	9/22/2008	5.810	107.237	105.875	104.555	103.260	102.000	100.877	100.193	99.967
12/22/1999	12/22/2009	9/22/2008	5.840	107.293	105.930	104.607	103.308	102.045	100.911	100.207	99.968
1/7/2000	1/7/2015	10/7/2008	5.950	126.880	120.282	114.446	109.481	105.508	102.594	100.777	100.025
1/13/2000	1/13/2010	10/14/2008	5.910	107.692	106.250	104.867	103.510	102.188	100.998	100.226	99.915
1/25/2000	1/25/2010	10/27/2008	5.970	107.974	106.519	105.100	103.708	102.351	101.118	100.282	99.913
1/27/2000	1/27/2010	10/27/2008	6.080	108.164	106.706	105.280	103.881	102.516	101.259	100.359	99.934
1/27/2000	1/27/2010	10/27/2008	6.210	108.349	106.890	105.462	104.062	102.694	101.418	100.449	99.967
2/7/2000	2/8/2010	11/7/2008	5.950	108.127	106.610	105.163	103.743	102.359	101.104	100.263	99.875
2/16/2000	2/8/2010	11/3/2008	5.950	108.127	106.610	105.163	103.743	102.359	101.104	100.263	99.875
2/16/2000	2/16/2010	11/17/2008	6.470	109.029	107.498	106.021	104.573	103.154	101.806	100.704	100.071
2/16/2000	2/16/2010	11/17/2008	6.690	109.355	107.821	106.342	104.891	103.469	102.103	100.934	100.187
3/6/2000	3/8/2010	9/8/2008	6.390	109.196	107.585	106.046	104.538	103.066	101.689	100.601	100.097
3/13/2000	3/15/2010	9/15/2008	6.090	108.853	107.239	105.683	104.159	102.676	101.330	100.369	99.993
3/14/2000	3/15/2010	11/14/2008	6.090	108.853	107.239	105.683	104.160	102.681	101.338	100.387	99.910
3/15/2000	3/15/2010	9/15/2008	5.950	108.636	107.023	105.469	103.947	102.470	101.152	100.288	99.982
3/21/2000	3/22/2010	9/22/2008	6.120	109.019	107.396	105.820	104.275	102.772	101.402	100.402	99.996
3/22/2000	3/22/2010	9/22/2008	5.960	108.767	107.146	105.572	104.030	102.533	101.194	100.305	99.975
4/5/2000	4/5/2010	10/6/2008	5.950	108.915	107.225	105.617	104.042	102.516	101.163	100.283	99.935
4/11/2000	4/12/2010	10/14/2008	5.950	109.031	107.333	105.704	104.109	102.565	101.192	100.294	99.927
4/11/2000	4/12/2010	10/14/2008	6.050	109.194	107.495	105.865	104.268	102.719	101.325	100.364	99.945
4/11/2000	4/12/2010	10/14/2008	6.470	109.879	108.175	106.539	104.936	103.373	101.908	100.733	100.103
4/11/2000	4/12/2010	10/14/2008	6.560	110.026	108.320	106.683	105.079	103.514	102.038	100.831	100.146
4/11/2000	4/12/2010	10/14/2008	6.750	110.336	108.628	106.988	105.382	103.812	102.317	101.043	100.250
4/12/2000	4/12/2010	10/14/2008	5.990	109.096	107.398	105.769	104.173	102.626	101.245	100.322	99.934
4/13/2000	4/13/2010	10/14/2008	6.560	110.044	108.338	106.697	105.091	103.522	102.044	100.834	100.146
4/24/2000	4/26/2010	10/24/2008	6.450	110.097	108.378	106.701	105.059	103.457	101.956	100.752	100.097
5/3/2000	5/3/2010	11/3/2008	6.240	109.797	108.016	106.322	104.665	103.060	101.598	100.520	99.975
5/3/2000	5/3/2010	11/3/2008	6.360	110.000	108.217	106.521	104.863	103.253	101.770	100.631	100.032
5/15/2000	5/17/2010	11/17/2008	6.990	111.337	109.528	107.782	106.073	104.405	102.814	101.418	100.446
5/30/2000	6/1/2010	12/1/2008	6.490	110.674	108.802	107.026	105.288	103.600	102.031	100.790	100.165
8/8/2000	8/9/2010	11/10/2008	5.990	110.794	108.741	106.775	104.858	103.026	101.432	100.380	99.896
8/18/2000	8/18/2010	11/18/2008	6.090	111.143	109.077	107.083	105.138	103.273	101.626	100.484	99.896
10/5/2000	10/5/2010	10/6/2008	5.710	110.876	108.656	106.539	104.491	102.590	101.047	100.188	99.901
10/10/2000	10/12/2010	10/10/2008	5.840	111.265	109.034	106.894	104.819	102.879	101.261	100.282	99.912
10/13/2000	10/13/2010	10/14/2008	5.750	111.089	108.859	106.718	104.644	102.715	101.132	100.220	99.894
10/23/2000	10/25/2010	10/23/2008	5.640	111.042	108.801	106.627	104.526	102.581	101.019	100.164	99.851
12/5/2000	12/6/2010	9/5/2008	5.410	110.899	108.509	106.232	104.062	102.126	100.695	100.077	99.984
12/11/2000	12/13/2010	9/11/2008	5.170	110.451	108.060	105.772	103.607	101.727	100.447	99.993	99.957
12/12/2000	12/13/2010	9/12/2008	5.110	110.312	107.923	105.637	103.480	101.620	100.388	99.991	99.955
12/15/2000	12/15/2010	9/15/2008	5.120	110.364	107.972	105.680	103.516	101.647	100.402	99.990	99.948
12/20/2000	12/20/2010	9/22/2008	4.950	110.040	107.647	105.348	103.192	101.380	100.283	99.977	99.921
12/21/2000	12/21/2010	9/22/2008	4.860	109.844	107.453	105.155	103.010	101.236	100.228	99.970	99.912
1/11/2001	1/11/2011	10/14/2008	5.370	111.204	108.720	106.348	104.103	102.128	100.700	100.046	99.847
1/12/2001	1/12/2011	10/14/2008	5.300	111.052	108.569	106.197	103.958	102.002	100.621	100.015	99.836
2/5/2001	2/7/2011	11/5/2008	4.820	110.127	107.584	105.174	102.958	101.166	100.177	99.832	99.644
2/7/2001	2/7/2011	11/7/2008	4.820	110.127	107.584	105.174	102.958	1			

Start Date	Maturity		Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Next Call Date									
4/23/2001	4/25/2011	4/24/2008	5.350	112.227	109.472	106.809	104.226	101.720	99.290	96.931	94.642
6/1/2001	6/1/2011	12/1/2008	4.990	111.430	108.544	105.850	103.425	101.473	100.306	99.999	99.996
12/13/2001	12/13/2011	9/15/2008	4.920	112.971	109.554	106.381	103.624	101.510	100.303	99.984	99.948
6/3/2002	6/4/2012	12/3/2008	4.490	112.803	108.926	105.474	102.700	100.831	99.971	99.629	99.369
6/4/2002	6/4/2012	12/4/2008	4.490	112.803	108.926	105.474	102.700	100.831	99.971	99.629	99.369
12/5/2002	12/5/2012	9/5/2008	3.790	111.087	106.880	103.493	101.173	100.132	99.992	99.978	99.964
3/6/2003	3/6/2013	9/8/2008	2.990	107.956	103.984	101.332	100.120	99.994	99.977	99.960	99.944
1/27/2004	1/27/2009	10/27/2008	2.890	101.196	100.806	100.392	100.064	99.891	99.731	99.572	99.414
2/5/2004	12/18/2008	12/19/2005	5.150	101.559	101.300	100.994	100.690	100.388	100.089	99.791	99.495
2/5/2004	4/26/2010	10/24/2008	6.200	109.680	107.964	106.290	104.652	103.062	101.609	100.531	99.998
2/5/2004	12/14/2010	9/15/2008	5.820	111.965	109.555	107.242	105.017	102.967	101.288	100.298	99.978
2/9/2004	2/9/2009	11/10/2008	3.110	101.374	100.891	100.451	100.084	99.877	99.686	99.495	99.306
2/17/2004	2/17/2009	11/17/2008	2.910	101.349	100.858	100.396	100.047	99.828	99.615	99.403	99.192
3/4/2004	3/4/2009	12/4/2008	2.970	101.477	100.914	100.404	100.015	99.748	99.488	99.229	98.972
3/12/2004	3/12/2009	9/12/2008	2.690	101.393	100.822	100.299	100.021	99.777	99.944	99.911	98.878
4/1/2004	4/1/2009	10/1/2008	2.770	101.562	100.918	100.339	100.011	99.915	99.827	99.739	99.652
5/24/2004	5/26/2009	11/24/2008	3.580	102.554	101.796	101.057	100.366	99.981	99.740	99.503	99.267
5/28/2004	5/28/2009	11/28/2008	3.700	102.664	101.904	101.158	100.448	100.016	99.765	99.523	99.282
6/11/2004	6/11/2009	9/11/2008	3.750	102.808	101.982	101.202	100.458	100.045	99.981	99.951	99.920
6/18/2004	6/20/2011	9/18/2008	4.120	109.239	106.386	103.790	101.653	100.343	99.986	99.931	99.876
7/2/2004	7/2/2014	10/2/2008	3.990	114.299	108.893	104.681	101.800	100.308	99.934	99.840	99.750
8/5/2004	8/5/2009	11/5/2008	3.470	103.021	102.030	101.103	100.293	99.947	99.765	99.586	99.407
12/13/2004	12/15/2014	9/15/2008	3.320	110.969	105.902	102.417	100.480	99.998	99.956	99.915	99.873
12/17/2004	12/17/2009	9/17/2008	3.710	104.417	103.079	101.791	100.623	100.054	99.969	99.922	99.875
5/5/2005	5/5/2010	5/5/2006	4.190	106.356	104.604	102.937	101.376	100.297	99.867	99.652	99.441
5/17/2005	5/17/2010	11/17/2008	4.070	106.289	104.525	102.827	101.255	100.231	99.867	99.652	99.441
6/6/2005	6/7/2010	9/8/2008	3.890	106.137	104.303	102.556	100.991	100.127	99.991	99.971	99.952
7/18/2005	7/19/2010	10/20/2008	4.160	107.035	105.096	103.225	101.495	100.325	99.940	99.799	99.662
9/1/2005	9/1/2015	12/1/2008	4.130	116.421	110.295	105.582	102.321	100.497	99.828	99.543	99.293
9/19/2005	9/19/2012	9/19/2008	3.820	110.926	106.904	103.574	101.237	100.150	99.971	99.919	99.866
9/26/2005	9/26/2012	9/26/2008	3.890	111.285	107.238	103.842	101.411	100.202	99.966	99.894	99.822
9/30/2005	9/30/2015	9/30/2008	4.440	118.800	112.408	107.262	103.497	101.114	100.125	99.923	99.840
10/26/2005	10/26/2015	10/27/2008	4.540	119.571	113.046	107.766	103.859	101.324	100.165	99.835	99.678
10/28/2005	10/28/2015	10/28/2008	4.140	116.916	110.686	105.834	102.464	100.548	99.942	99.766	99.604
10/28/2005	10/28/2015	10/28/2008	4.310	118.048	111.681	106.634	103.021	100.828	99.994	99.793	99.631
11/4/2005	11/4/2010	11/4/2008	4.520	108.601	106.325	104.173	102.194	100.682	100.000	99.779	99.603
11/21/2005	11/21/2012	11/21/2008	4.290	113.221	108.949	105.234	102.385	100.609	100.000	99.779	99.603
12/22/2005	12/22/2008	12/22/2008	4.750	101.491	101.228	100.911	100.596	100.283	99.933	99.828	99.727
1/6/2006	1/6/2016	10/6/2008	4.020	116.260	109.975	105.235	102.041	100.370	99.933	99.828	99.727
1/17/2006	1/19/2016	10/17/2008	4.080	116.812	110.458	105.600	102.280	100.464	99.934	99.788	99.651
3/20/2006	3/21/2011	9/21/2008	4.760	110.360	107.716	105.166	102.690	100.287	99.933	99.828	99.727
4/11/2006	4/11/2011	10/14/2008	4.980	111.045	108.321	105.743	103.387	101.463	100.307	99.926	99.803
4/19/2006	4/19/2013	10/20/2008	4.630	115.644	110.924	106.762	103.461	101.204	100.146	99.862	99.725
4/24/2006	4/25/2016	10/24/2008	4.440	119.825	112.962	107.526	103.592	101.122	100.083	99.821	99.668
4/28/2006	4/28/2011	10/28/2008	5.090	111.575	108.826	106.164	103.581	101.077	100.307	99.926	99.803
5/5/2006	5/6/2013	11/5/2008	4.780	116.360	111.551	107.310	103.898	101.492	100.242	99.828	99.641
5/5/2006	5/5/2016	11/5/2008	4.350	119.087	112.264	106.958	103.191	100.903	99.997	99.746	99.567
5/5/2006	5/5/2016	11/5/2008	4.530	120.374	113.401	107.881	103.854	101.284	100.128	99.782	99.600
5/5/2006	5/5/2016	5/5/2009	4.980	123.620	116.320	110.334	105.725	102.496	100.509	99.379	98.624
5/9/2006	5/9/2011	11/10/2008	5.050	111.445	108.634	105.989	103.582	101.608	100.374	99.890	99.680
5/15/2006	5/16/2016	11/17/2008	4.350	119.220	112.385	107.046	103.249	100.932	99.997	99.716	99.506
5/15/2006	5/16/2016	11/17/2008	4.520	120.441	113.462	107.921	103.879	101.295	100.124	99.754	99.542
5/19/2006	5/19/2016	11/19/2008	4.510	120.406	113.432	107.894	103.858	101.282	100.117	99.754	99.542
6/12/2006	6/13/2016	9/12/2008	4.620	121.296	114.172	108.478	104.277	101.530	100.246	99.973	99.937
6/26/2006	6/27/2016	9/26/2008	4.730	122.282	115.059	109.204	104.813	101.863	100.353	99.952	99.878
6/28/2006	6/28/2013	12/28/2006	4.950	117.681	112.735	108.292	104.644	101.981	100.442	99.968	99.890
6/28/2006	6/28/2013	9/29/2008	4.950	117.681	112.735	108.292	104.644	101.981	100.442	99.968	99.890
6/30/2006	7/1/2013	9/30/2008	4.890	117.233	112.248	107.854	104.289	101.742	100.352	99.999	99.996
7/14/2006	7/15/2013	10/14/2008	4.890	117.424	112.423	107.987	104.383	101.796	100.371	99.914	99.776
7/19/2006	7/19/2011	10/20/2008	5.250	112.671	109.666	106.820	104.228	102.070	100.598	99.983	99.809
7/20/2006	7/20/2011	10/20/2008	5.300	112.831	109.820	106.925	104.124	101.413	100.176	99.820	99.621
7/24/2006	7/25/2016	10/24/2008	4.660	121.906	114.670	108.853	104.537	101.679	100.270	99.857	99.701
7/28/2006	7/28/2016	10/28/2008	4.490	120.690	113.587	107.955	103.871	101.271	100.127	99.822	99.660
8/1/2006	8/1/2016	8/3/2009	4.890	123.478	116.028	109.993	105.413	102.244	100.251	99.996	98.055
8/11/2006	8/11/2011	11/12/2008	4.790	111.466	108.408	105.577	103.102	101.198	100.176	99.820	99.621
8/21/2006	8/21/2013	11/21/2008	4.750	117.035	111.980	107.542	104.011	101.542	100.255	99.800	99.569
8/25/2006	8/25/2016	11/25/2008	4.350	119.778	112.737	107.253	103.360	100.979	100.000	99.854	99.728
8/28/2006	8/29/2011	11/28/2008	4.890	112.006	108.923	106.024	103.467	101.458	100.287	99.823	99.569
9/22/2006	9/22/2011	9/22/2008	4.790	111.884	108.727	105.779	103.213	101.249	100.216	99.965	99.904
9/29/2006	9/29/2011	9/29/2008	4.590	111.358	108.206	105.277	102.772	100.946	100.107	99.938	99.858
10/10/2006	10/10/2013	10/10/2008	4.250	114.717	109.673	105.483	102.410	100.575	99.970	99.838	99.726
10/12/2006	10/15/2013	10/14/2008	4.500	116.037	110.910	106.534	103.183	100.999	100.073	99.854	99.728
10/20/2006	10/20/2009	10/20/2008	4.930	105.330	104.147	103.004	101.882	100.782	100.058	99.890	99.723
10/30/2006	10/31/2011	10/30/2008	4.850	112.448	109.184	106.033	102.992	100.689	100.058	99.890	99.723
11/3/2006	11/3/2011	11/3/2008	4.690	111.838	108.526	105.381	102.359	100.436	99.987	99.811	99.638
11/6/2006	11/6/2013	11/6/2008	4.290	115.018	109.903	105.659	102.533	100.641	99.950	99.732	99.550
11/10/2006	11/13/2012	11/10/2008	4.390	113.544	109.264	105.520	102.608	100.732	99.977	99.732	99.531
11/17/2006	11/18/2013	11/17/2008	4.350	115.468	110.320	105.996	102.774	100.765	99.956	97.786	96.613
11/24/2006	11/25/2016	11/24/2008	4.190	119.002	111.937	106.552	102.838	100.702	98.907	97.623	96.449
11/30/2006	12/2/2013	12/1/2008	4.350	115.410	110.221	105.914	102.719	100.743	99.915	99.596	99.343
12/1/2006	12/1/2016										

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
12/12/2006	12/12/2016	9/12/2008	4.050	117.918	110.961	105.778	102.314	100.452	99.989	99.956	99.923
12/13/2006	12/15/2008	9/15/2008	4.890	101.440	101.184	100.886	100.591	100.298	100.062	99.980	99.938
12/13/2006	12/14/2009	12/15/2008	4.830	105.846	104.501	103.210	101.946	100.796	100.072	99.704	99.416
12/19/2006	12/19/2011	9/19/2008	4.490	111.629	108.237	105.142	102.575	100.793	100.056	99.954	99.901
12/19/2006	12/19/2016	12/19/2008	4.190	119.057	111.940	106.535	102.819	100.681	99.851	99.501	99.202
12/20/2006	12/20/2013	12/22/2008	4.500	116.407	111.142	106.668	103.255	101.035	100.004	99.595	99.290
12/21/2006	12/21/2011	9/22/2008	4.530	111.787	108.389	105.278	102.683	100.861	100.076	99.951	99.893
12/27/2006	12/27/2013	12/29/2008	4.500	116.495	111.222	106.727	103.295	101.056	100.006	99.578	99.255
12/28/2006	12/28/2016	9/29/2008	4.250	119.621	112.430	106.914	103.074	100.810	100.016	99.913	99.836
12/28/2006	12/28/2016	12/29/2008	4.400	120.773	113.434	107.712	103.638	101.118	99.987	99.544	99.218
1/8/2007	1/9/2012	10/8/2008	4.750	112.621	109.133	105.936	103.222	101.220	100.189	99.898	99.786
1/12/2007	1/12/2017	1/12/2009	4.420	120.879	113.477	107.733	103.648	101.121	99.942	99.438	99.070
1/16/2007	1/17/2017	1/17/2012	4.790	123.821	116.079	109.783	104.746	100.635	97.125	93.988	91.084
1/23/2007	1/23/2014	10/23/2008	4.490	116.547	111.214	106.694	103.259	101.028	100.074	99.834	99.686
1/23/2007	1/23/2017	10/23/2008	4.460	121.325	113.873	108.042	103.867	101.245	100.116	99.829	99.681
1/29/2007	1/29/2014	1/29/2009	4.790	118.219	112.791	108.072	104.337	101.721	100.255	99.571	99.135
2/2/2007	2/2/2017	11/3/2008	4.690	123.033	115.337	109.250	104.767	101.809	100.320	99.833	99.643
2/9/2007	2/9/2012	11/10/2008	4.750	112.892	109.319	106.044	103.269	101.225	100.170	99.815	99.622
2/9/2007	2/9/2012	11/10/2008	4.750	112.892	109.319	106.044	103.269	101.225	100.170	99.815	99.622
2/9/2007	2/9/2017	11/10/2008	4.470	121.398	113.889	108.049	103.867	101.252	100.103	99.761	99.568
2/12/2007	2/13/2012	2/12/2009	4.880	113.394	109.808	106.491	103.639	101.483	100.191	99.532	99.076
2/15/2007	2/15/2012	2/17/2009	4.990	113.803	110.206	106.864	103.966	101.727	100.331	99.601	99.120
2/20/2007	2/21/2017	11/20/2008	4.390	120.922	113.476	107.707	103.619	101.104	100.040	99.761	99.568
2/20/2007	2/21/2017	2/21/2012	4.850	124.378	116.183	109.601	104.514	100.479	97.039	93.912	90.998
2/23/2007	2/23/2017	11/24/2008	4.250	119.856	112.548	106.971	103.102	100.821	100.055	99.995	99.990
2/23/2007	2/23/2017	11/24/2008	4.350	120.634	113.225	107.505	103.476	101.022	100.009	99.995	99.990
2/28/2007	3/1/2010	9/1/2008	4.890	106.797	105.213	103.713	102.242	100.799	100.055	99.995	99.990
3/2/2007	3/2/2012	12/2/2008	4.490	112.108	108.481	105.226	102.574	100.772	100.055	99.995	99.990
3/9/2007	3/10/2014	3/9/2009	4.450	116.448	111.024	106.497	103.096	100.914	99.782	99.158	98.647
3/16/2007	3/16/2017	9/16/2008	4.090	118.633	111.461	106.107	102.511	100.531	99.988	99.943	99.899
3/20/2007	3/20/2012	9/22/2008	4.550	112.546	108.896	105.578	102.849	100.943	100.111	99.955	99.899
3/21/2007	3/21/2017	9/22/2008	4.220	119.705	112.379	106.819	102.985	100.755	100.008	99.933	99.875
3/23/2007	3/23/2017	3/23/2009	4.290	120.277	112.875	107.207	103.250	100.868	99.689	99.036	98.493
3/23/2007	3/23/2017	3/23/2009	4.290	120.277	112.875	107.207	103.250	100.868	99.689	99.036	98.493
3/23/2007	3/23/2017	6/23/2009	4.290	120.277	112.875	107.207	103.250	100.868	99.689	99.036	98.493
3/30/2007	3/30/2012	9/30/2008	4.670	113.103	109.416	105.872	102.465	100.922	99.811	99.139	98.574
4/2/2007	4/2/2012	4/2/2009	4.590	112.696	108.977	105.622	102.863	100.922	99.811	99.139	98.574
4/9/2007	4/9/2009	10/9/2008	4.750	102.839	102.183	101.572	100.970	100.391	100.031	99.895	99.786
4/9/2007	4/10/2017	10/9/2008	4.150	119.164	111.869	106.406	102.699	100.618	99.961	99.827	99.715
4/12/2007	4/12/2017	10/14/2008	4.250	119.973	112.565	106.950	103.066	100.797	99.987	99.832	99.714
4/13/2007	4/13/2017	4/13/2009	4.450	121.564	113.951	108.047	103.843	101.204	99.811	99.043	98.438
4/18/2007	4/20/2009	10/20/2008	4.940	103.106	102.439	101.797	101.163	100.545	100.101	99.903	99.763
4/23/2007	4/23/2012	10/23/2008	4.650	113.183	109.436	106.013	103.169	101.137	100.150	99.858	99.709
4/23/2007	4/23/2014	4/23/2010	4.620	117.689	112.123	107.391	103.741	101.105	99.135	97.483	95.963
4/27/2007	4/27/2012	4/27/2009	4.550	112.869	109.125	105.710	102.907	100.933	99.787	99.060	98.431
4/27/2007	4/27/2017	10/27/2008	4.250	120.150	112.725	107.066	103.142	100.833	99.983	99.786	99.628
5/2/2007	5/2/2014	5/3/2010	4.590	117.394	111.806	107.125	103.534	100.937	98.969	97.304	95.766
5/4/2007	5/5/2014	5/4/2009	4.550	117.211	111.636	106.976	103.442	101.107	99.780	98.977	98.320
5/14/2007	5/16/2011	11/14/2008	4.500	110.045	107.252	104.655	102.392	100.745	100.003	99.747	99.538
5/18/2007	5/18/2017	11/18/2008	4.190	119.697	112.296	106.723	102.905	100.719	99.983	99.786	99.628
5/22/2007	5/22/2012	5/22/2009	4.690	113.544	109.709	106.207	103.297	101.187	99.882	99.041	98.339
5/22/2007	5/22/2012	5/22/2009	4.690	113.544	109.709	106.207	103.297	101.187	99.882	99.041	98.339
5/22/2007	5/22/2012	5/22/2009	4.710	113.619	109.781	106.274	103.352	101.225	99.906	99.058	98.354
5/22/2007	5/22/2017	5/22/2012	4.750	124.237	116.264	109.785	104.567	100.243	96.496	93.123	89.922
5/25/2007	5/25/2012	11/25/2008	4.650	113.434	109.599	106.100	103.205	101.140	100.123	99.992	99.972
5/29/2007	5/30/2017	12/1/2008	4.250	120.313	112.831	107.129	103.179	100.846	99.983	99.786	99.628
6/1/2007	6/1/2010	12/1/2008	4.990	108.019	106.172	104.420	102.718	101.197	100.239	99.999	99.996
6/1/2007	6/2/2014	12/1/2008	4.500	117.039	111.423	106.767	103.268	101.023	100.108	99.995	99.990
6/7/2007	6/7/2012	9/8/2008	4.940	114.535	110.608	107.008	103.945	101.650	100.342	99.992	99.972
6/7/2007	6/7/2017	6/8/2009	4.820	124.780	116.704	110.267	105.473	102.217	100.275	99.145	98.342
6/8/2007	6/9/2014	9/8/2008	4.730	118.420	112.705	107.860	104.102	101.538	100.267	99.984	99.959
6/8/2007	6/8/2017	9/8/2008	4.490	122.118	114.349	108.332	104.032	101.324	100.176	99.980	99.958
6/11/2007	6/12/2017	9/11/2008	4.490	122.168	114.394	108.365	104.054	101.336	100.177	99.971	99.937
6/18/2007	6/19/2017	9/18/2008	4.500	122.337	114.544	108.481	104.135	101.381	100.187	99.954	99.902
6/18/2007	6/19/2017	6/18/2009	4.840	125.104	116.997	110.500	105.645	102.328	100.327	99.150	98.311
6/19/2007	6/19/2017	9/19/2008	4.650	123.555	115.617	109.357	104.773	101.772	100.311	99.962	99.910
6/20/2007	6/20/2012	9/22/2008	4.890	114.524	110.586	106.960	103.887	101.599	100.321	99.973	99.918
6/20/2007	6/20/2012	9/22/2008	4.960	114.790	110.846	107.203	104.094	101.747	100.378	99.977	99.922
6/22/2007	6/22/2017	9/22/2008	4.500	122.374	114.578	108.506	104.152	101.390	100.188	99.947	99.886
6/26/2007	6/26/2012	6/26/2009	5.130	115.522	111.556	107.858	104.649	102.149	100.449	99.350	98.512
6/28/2007	6/28/2017	9/29/2008	4.500	122.449	114.646	108.557	104.186	101.409	100.190	99.933	99.855
7/13/2007	7/13/2012	10/14/2008	4.690	113.899	109.904	106.286	103.303	101.187	100.156	99.881	99.761
7/13/2007	7/13/2017	10/14/2008	4.290	120.699	113.078	107.291	103.274	100.898	100.010	99.834	99.713
7/13/2007	7/13/2017	7/13/2011	4.900	125.682	117.462	110.833	105.657	101.609	98.312	95.462	92.878
7/18/2007	7/18/2017	7/19/2010	4.780	124.761	116.644	110.179	105.361	101.935	99.431	97.414	95.632
7/19/2007	7/19/2012	7/20/2009	4.890	114.753	110.731	107.038	103.923	101.588	100.052	99.006	98.147
7/20/2007	7/20/2017	10/20/2008	4.290	120.783	113.153	107.346	103.310	100.915	100.009	99.813	99.674
7/24/2007	7/24/2012	7/24/2009	4.820	114.549	110.528	106.839	103.750	101.459	99.961	98.930	98.066
7/27/2007	7/27/2012	10/27/2008	4.590	113.691	109.692	106.067	103.111	101.054	100.104	99.840	99.681
7/27/2007	7/28/2014	10/27/2008	4.350	116.634	110.998	106.357	102.942	100.825	100.002	99.799	99.638
7/27/2007	7/27/2017	10/27/2008	4.180	119.976	112.461	106.802					

Start Date	Maturity		Coupon	Next Call							
	Date	Date		-300	-200	-100	Base	+100	+200	+300	+400
8/2/2007	8/2/2017	11/3/2008	4.050	118.770	111.390	105.980	102.393	100.485	99.893	99.702	99.531
8/2/2007	8/2/2017	11/3/2008	4.150	119.576	112.073	106.502	102.734	100.633	99.928	99.719	99.549
8/6/2007	8/6/2012	11/6/2008	4.490	113.262	109.214	105.623	102.760	100.841	100.018	99.769	99.587
8/6/2007	8/6/2012	11/6/2008	4.490	113.262	109.214	105.623	102.760	100.841	100.018	99.769	99.587
8/9/2007	8/11/2014	8/9/2011	4.860	119.501	113.606	108.528	104.299	100.778	97.743	95.000	92.439
8/9/2007	8/9/2017	11/10/2008	3.990	118.366	111.055	105.725	102.225	100.414	99.866	99.665	99.475
8/9/2007	8/9/2017	11/10/2008	3.990	118.366	111.055	105.725	102.225	100.414	99.866	99.665	99.475
8/13/2007	8/13/2012	8/13/2009	4.590	113.744	109.676	106.028	103.073	100.970	99.598	98.596	97.709
8/16/2007	8/16/2017	11/17/2008	3.990	118.443	111.125	105.774	102.256	100.426	99.866	99.665	99.475
8/17/2007	8/17/2012	11/17/2008	4.150	112.054	108.045	104.576	101.954	100.413	99.866	99.665	99.475
8/17/2007	8/17/2012	11/17/2008	4.350	112.846	108.805	105.242	102.452	100.662	99.866	99.665	99.475
8/17/2007	8/17/2017	11/17/2008	4.000	118.535	111.203	105.832	102.293	100.441	99.866	99.665	99.475
8/20/2007	8/20/2010	8/20/2009	4.590	108.191	106.154	104.184	102.307	100.718	99.536	98.571	97.675
8/20/2007	8/20/2014	8/20/2009	4.250	116.077	110.411	105.813	102.497	100.444	99.200	98.244	97.353
8/20/2007	8/20/2014	8/20/2009	4.250	116.077	110.411	105.813	102.497	100.444	99.200	98.244	97.353
8/24/2007	8/24/2010	11/24/2008	4.460	107.982	105.943	103.965	102.095	100.639	99.536	98.571	97.675
8/24/2007	8/24/2012	11/24/2008	4.050	111.738	107.738	104.304	101.752	100.323	99.866	99.665	99.475
8/28/2007	8/28/2014	8/28/2009	4.350	116.766	111.075	106.401	102.965	100.732	99.349	98.328	97.408
8/30/2007	8/30/2012	8/31/2009	4.390	113.162	109.101	105.480	102.619	100.648	99.356	98.356	97.436
8/30/2007	9/2/2014	12/1/2008	3.890	113.922	108.477	104.321	101.543	100.211	99.997	99.992	99.986
8/31/2007	8/31/2012	8/31/2009	4.370	113.094	109.035	105.422	102.575	100.622	99.342	98.347	97.428
9/4/2007	9/4/2012	12/4/2008	4.190	112.247	108.165	104.655	101.996	100.422	99.998	99.987	99.976
9/4/2007	9/4/2012	12/4/2008	4.220	112.367	108.280	104.754	102.070	100.456	99.998	99.987	99.976
9/4/2007	9/5/2017	12/4/2008	3.890	117.633	110.405	105.221	101.894	100.291	99.993	99.979	99.966
9/6/2007	9/7/2010	9/8/2008	4.160	107.410	105.311	103.314	101.496	100.287	99.996	99.976	99.957
9/7/2007	9/7/2012	9/8/2008	4.090	111.881	107.815	104.348	101.775	100.317	99.995	99.975	99.956
9/10/2007	9/11/2017	9/10/2008	3.690	116.101	109.153	104.314	101.360	100.140	99.979	99.949	99.918
9/11/2007	9/13/2010	9/11/2009	4.430	108.035	105.923	103.899	102.004	100.455	99.281	98.282	97.335
9/11/2007	9/11/2017	9/11/2008	3.590	115.311	108.519	103.870	101.106	100.074	99.976	99.946	99.915
9/12/2007	9/12/2014	9/12/2008	3.690	112.882	107.573	103.626	101.115	100.096	99.977	99.944	99.911
9/13/2007	9/15/2014	9/14/2009	3.990	114.637	109.111	104.800	101.835	100.022	98.826	97.828	96.878
9/13/2007	9/13/2017	9/13/2010	3.990	118.526	111.156	105.765	102.072	99.449	97.342	95.441	93.637
9/14/2007	9/14/2011	9/15/2008	4.090	109.641	106.547	103.788	101.592	100.283	99.989	99.950	99.912
9/14/2007	9/14/2012	9/14/2010	4.390	113.169	109.046	105.403	102.466	100.113	98.084	96.201	94.394
9/17/2007	9/17/2012	9/17/2009	4.220	112.520	108.419	104.855	102.129	100.304	99.074	98.059	97.101
9/27/2007	9/27/2010	9/29/2008	4.250	107.830	105.707	103.649	101.753	100.419	99.991	99.917	99.842
9/27/2007	9/29/2014	9/27/2010	4.490	117.636	111.536	106.489	102.913	100.375	98.281	96.364	94.521
9/27/2007	9/27/2017	9/29/2008	3.650	115.946	109.042	104.233	101.311	100.125	99.946	99.872	99.797
9/28/2007	9/28/2010	9/29/2008	4.290	107.925	105.801	103.739	101.831	100.461	99.994	99.917	99.839
9/28/2007	9/28/2012	9/29/2008	3.850	111.144	107.104	103.729	101.334	100.180	99.960	99.883	99.805
10/3/2007	10/3/2012	10/3/2008	3.830	110.938	106.859	103.525	101.202	100.123	99.915	99.822	99.729
10/9/2007	10/9/2012	10/9/2009	4.400	113.334	109.091	105.149	102.107	100.323	99.128	98.081	97.069
10/11/2007	10/14/2014	4/13/2009	4.180	115.817	110.133	105.597	102.384	100.475	99.498	98.854	98.266
10/11/2007	10/11/2017	10/14/2008	3.990	118.610	111.192	105.789	102.250	100.418	99.928	99.806	99.691
10/15/2007	10/16/2017	10/15/2008	3.990	118.666	111.241	105.824	102.271	100.426	99.922	99.787	99.658
10/22/2007	10/22/2012	10/22/2008	3.990	111.800	107.663	104.164	101.623	100.268	99.910	99.764	99.619
10/25/2007	10/27/2014	10/25/2011	4.360	117.032	111.222	106.338	102.323	98.931	95.913	93.117	90.466
10/26/2007	10/26/2017	10/27/2008	3.390	113.968	107.451	103.136	100.735	99.983	99.813	99.656	99.501
10/29/2007	10/29/2009	10/29/2008	4.250	104.653	103.466	102.302	101.172	100.289	99.946	99.780	99.616
10/29/2007	10/29/2012	10/29/2009	3.990	111.878	107.733	104.214	101.632	99.918	98.670	97.569	96.509
11/2/2007	11/3/2014	11/2/2009	3.990	114.683	109.088	104.764	101.800	99.921	98.607	97.481	96.409
11/2/2007	11/3/2014	11/2/2010	4.190	115.858	110.131	105.572	102.171	99.570	97.379	95.373	93.460
11/5/2007	11/5/2014	11/5/2009	3.990	114.705	109.108	104.779	101.808	99.924	98.605	97.474	96.397
11/5/2007	11/6/2017	11/5/2012	4.390	121.988	113.994	107.632	102.457	98.064	94.162	90.585	87.236
11/6/2007	11/6/2017	11/6/2008	3.480	114.569	107.881	103.419	100.867	99.985	99.765	99.582	99.401
11/8/2007	11/9/2009	11/10/2008	4.100	104.550	103.302	102.115	100.973	100.173	99.878	99.686	99.497
11/9/2007	11/10/2014	11/9/2011	4.330	116.770	110.943	106.091	102.096	98.703	95.673	92.860	90.192
11/13/2007	11/14/2011	11/13/2008	3.760	108.990	105.773	103.027	101.009	100.071	99.803	99.599	99.396
11/13/2007	11/13/2012	11/13/2008	3.680	110.574	106.459	103.173	100.969	100.041	99.788	99.587	99.386
11/13/2007	11/13/2014	11/13/2008	3.350	111.078	106.016	102.502	100.521	99.929	99.721	99.520	99.319
11/19/2007	11/19/2014	11/19/2009	3.750	113.448	108.013	103.933	101.243	99.543	98.280	97.137	96.030
11/19/2007	11/19/2014	11/19/2009	3.750	113.448	108.013	103.933	101.243	99.543	98.280	97.137	96.030
11/19/2007	11/19/2014	11/21/2011	4.270	116.521	110.714	105.882	101.903	98.517	95.484	92.661	89.981
11/19/2007	11/20/2017	11/19/2012	4.290	121.093	112.977	106.676	101.674	97.432	93.626	90.103	86.778
11/20/2007	11/20/2017	11/22/2010	3.740	116.789	109.663	104.603	101.146	98.577	96.396	94.377	92.441
11/23/2007	11/24/2017	11/23/2011	3.990	118.456	110.528	104.901	100.843	97.538	94.578	91.796	89.135
11/23/2007	11/24/2017	11/23/2011	3.990	118.456	110.528	104.901	100.843	97.538	94.578	91.796	89.135
11/29/2007	11/29/2017	12/1/2008	2.950	110.714	105.038	101.644	100.152	98.762	97.561	96.409	95.282
11/30/2007	11/30/2017	11/30/2009	3.190	112.532	106.352	102.426	100.185	98.762	97.561	96.409	95.282
12/6/2007	12/6/2017	12/7/2009	3.250	112.839	106.529	102.524	100.214	98.743	97.515	96.347	95.203
12/7/2007	12/7/2012	12/7/2009	3.450	109.668	105.578	102.472	100.412	98.984	97.760	96.588	95.440
12/10/2007	12/10/2010	12/10/2009	3.870	107.421	105.073	102.888	101.015	99.541	98.283	97.095	95.936
12/10/2007	12/11/2017	12/10/2010	3.450	114.452	107.763	103.207	100.103	97.682	95.530	93.495	91.529
12/11/2007	12/11/2012	12/11/2009	3.760	111.023	106.813	103.422	101.046	99.436	98.149	96.955	95.794
12/14/2007	12/14/2010	12/15/2008	3.690	107.049	104.703	102.535	100.804	99.984	99.658	99.372	99.087
12/20/2007	12/20/2012	12/21/2009	3.600	110.432	106.269	102.986	100.744	99.203	97.925	96.716	95.534
12/20/2007	12/20/2012	12/21/2009	3.750	111.068	106.715	103.037	100.791	99.361	98.111	96.905	95.723
12/24/2007	12/26/2017	12/24/2012	3.990	118.739	110.948	104.962	100.165	96.008	92.229	88.690	85.343
12/26/2007	12/26/2012	12/26/2008	3.460	109.892	105.778	102.612	100.644	99.900	99.562	99.243	98.927
12/26/2007	12/26/2012	12/27/2010	3.960	112.038	107.754	104.116	101.227	98.812	96.623	94.543	92.531
1/2/2008	1/2/2013	1/4/2010	3.490	109.911	105.742						

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
1/8/2008	1/8/2013	1/8/2010	3.150	108.507	104.514	101.690	99.862	98.474	97.195	95.950	94.728
1/8/2008	1/8/2018	10/8/2008	2.570	107.934	103.133	100.651	99.992	99.882	99.775	99.668	99.562
1/8/2008	1/8/2018	10/8/2008	2.640	108.412	103.434	100.787	100.004	99.890	99.782	99.676	99.569
1/10/2008	1/10/2011	1/12/2009	3.100	105.782	103.394	101.350	100.131	99.671	99.312	98.956	98.604
1/11/2008	1/11/2018	1/12/2009	2.720	108.996	103.811	100.974	99.925	99.530	99.170	98.812	98.457
1/14/2008	1/16/2018	1/14/2011	3.240	112.918	106.564	102.344	99.399	97.000	94.805	92.708	90.676
1/16/2008	1/16/2013	10/16/2008	2.550	106.025	102.562	100.536	99.992	99.862	99.733	99.604	99.476
1/16/2008	1/16/2013	1/16/2009	2.690	106.612	102.994	100.760	99.900	99.510	99.136	98.765	98.396
1/16/2008	1/16/2015	1/16/2009	2.640	107.226	103.078	100.723	99.878	99.491	99.117	98.746	98.378
1/16/2008	1/16/2018	10/16/2008	2.380	106.736	102.436	100.373	99.970	99.840	99.711	99.582	99.454
1/17/2008	1/17/2018	10/17/2008	2.250	105.936	101.989	100.229	99.953	99.821	99.689	99.557	99.426
1/18/2008	1/18/2013	1/20/2009	2.550	106.039	102.574	100.543	99.840	99.453	99.073	98.696	98.323
1/18/2008	1/20/2015	10/20/2008	2.350	105.758	102.136	100.315	99.966	99.825	99.685	99.545	99.406
1/18/2008	1/18/2018	10/20/2008	2.290	106.187	102.127	100.270	99.958	99.823	99.688	99.554	99.420
1/24/2008	1/24/2012	7/24/2009	2.440	104.981	102.143	100.342	99.334	98.468	97.621	96.789	95.972
1/24/2008	1/24/2013	1/25/2010	2.500	105.873	102.461	100.361	98.896	97.561	96.258	94.979	93.725
1/25/2008	1/25/2013	1/26/2009	2.250	104.687	100.882	100.123	99.718	99.316	98.918	98.523	98.131
1/25/2008	1/25/2013	1/25/2011	2.650	106.478	102.799	100.117	97.792	95.573	93.422	91.331	89.297
1/28/2008	1/28/2010	1/28/2009	2.630	103.254	101.830	100.499	99.875	99.464	99.057	98.653	98.253
1/28/2008	1/28/2013	1/28/2011	2.990	107.969	103.987	101.035	98.609	96.359	94.189	92.081	90.032
1/30/2008	1/30/2013	2/1/2010	2.670	106.631	103.018	100.696	99.091	97.659	96.270	94.907	93.571
2/7/2008	2/7/2013	2/8/2010	2.490	105.777	102.362	100.292	98.818	97.458	96.129	94.825	93.545
2/13/2008	2/13/2013	2/14/2011	2.920	107.659	103.733	100.788	98.334	96.054	93.859	91.729	89.658
2/14/2008	2/14/2018	2/14/2012	3.190	111.992	105.541	101.151	97.637	94.473	91.482	88.618	85.864
2/15/2008	2/16/2010	2/17/2009	2.350	102.929	101.446	100.206	99.674	99.223	98.777	98.335	97.897
2/19/2008	2/19/2013	2/19/2010	2.590	106.203	102.414	100.419	98.964	97.576	96.215	94.881	93.571
2/22/2008	2/22/2011	2/23/2009	2.500	104.528	102.042	100.290	99.746	99.279	98.816	98.358	97.904
2/25/2008	2/25/2013	2/25/2011	3.090	108.487	104.388	101.291	98.770	96.450	94.220	92.058	89.956
2/25/2008	2/26/2018	2/25/2009	2.420	107.100	102.662	100.454	99.711	99.230	98.757	98.288	97.824
3/7/2008	3/9/2015	3/7/2011	2.890	108.585	103.942	100.693	98.097	95.739	93.483	91.299	89.178
3/7/2008	3/7/2018	3/7/2013	3.550	115.445	108.250	102.622	97.911	93.732	89.887	86.278	82.863
3/10/2008	3/11/2013	3/10/2010	2.390	105.408	102.092	100.079	98.547	97.103	95.691	94.307	92.950
3/11/2008	3/11/2011	3/11/2009	2.090	103.452	101.235	99.997	99.444	98.927	98.415	97.909	97.409
3/12/2008	3/12/2013	3/12/2009	2.010	103.892	101.155	99.947	99.401	98.881	98.367	97.859	97.356
3/14/2008	3/14/2011	9/15/2008	1.990	103.222	101.058	100.057	99.985	99.947	99.908	99.869	99.830
3/14/2008	3/14/2018	3/15/2010	2.400	106.903	102.513	100.169	98.570	97.111	95.691	94.300	92.935
3/17/2008	3/18/2013	3/17/2011	2.690	106.735	102.928	100.060	97.579	95.235	92.970	90.773	88.639
3/17/2008	3/17/2015	3/17/2011	2.620	106.620	102.587	99.831	97.395	95.065	92.806	90.613	88.483
3/17/2008	3/19/2018	3/18/2013	3.300	113.534	106.684	101.306	96.740	92.636	88.626	85.235	81.828
3/25/2008	3/27/2023	3/25/2013	3.150	113.677	105.943	100.509	96.011	91.958	88.176	84.598	81.196
3/26/2008	3/26/2018	3/26/2012	2.980	110.496	104.476	100.275	96.781	93.565	90.507	87.576	84.759
3/28/2008	3/28/2013	3/28/2011	2.800	107.263	103.319	100.378	97.863	95.491	93.200	90.977	88.818
3/28/2008	3/28/2013	3/28/2011	2.820	107.352	103.392	100.434	97.914	95.541	93.249	91.025	88.865
3/28/2008	3/28/2018	3/30/2009	2.020	104.711	101.369	99.991	99.392	98.828	98.271	97.721	97.176
3/28/2008	3/28/2018	3/28/2011	2.770	109.565	104.104	100.559	97.849	95.431	93.130	90.905	88.747
3/31/2008	3/31/2011	3/31/2009	1.990	103.315	101.132	99.967	99.378	98.809	98.247	97.691	97.142
4/14/2008	4/14/2015	4/14/2011	2.750	107.329	103.008	100.082	97.558	95.158	92.837	90.587	88.402
4/28/2008	4/28/2015	4/28/2011	3.250	110.861	105.715	101.929	99.003	96.445	94.048	91.743	89.511
4/28/2008	4/30/2018	10/28/2008	2.150	105.477	101.756	100.187	99.938	99.770	99.603	99.436	99.269
4/30/2008	4/30/2018	4/30/2013	3.740	117.091	109.442	103.532	98.662	94.368	90.414	86.704	83.192
5/2/2008	5/4/2015	5/2/2011	3.990	115.753	110.132	105.146	100.065	94.871	90.249	86.459	83.380
5/5/2008	5/5/2015	5/5/2011	3.170	110.228	105.160	101.471	98.577	96.024	93.622	91.310	89.072
5/8/2008	5/8/2015	5/10/2010	2.960	109.039	104.328	101.339	99.348	97.694	96.129	94.605	93.113
5/19/2008	5/19/2015	5/21/2012	4.700	119.914	113.319	106.919	100.227	93.382	87.147	81.994	77.763
5/19/2008	5/21/2018	5/20/2013	3.890	118.373	110.466	104.335	99.296	94.883	90.845	87.076	83.515
5/23/2008	5/23/2013	5/23/2011	4.040	113.204	108.625	104.252	99.526	94.523	90.003	86.249	83.166
5/23/2008	5/23/2018	5/23/2011	3.270	113.489	106.892	102.366	99.069	96.340	93.850	91.482	89.198
5/27/2008	5/27/2010	5/27/2009	2.790	104.153	102.399	100.763	99.759	99.030	98.322	97.624	96.936
5/27/2008	5/27/2011	5/27/2010	3.220	106.655	103.924	101.619	99.778	98.111	96.500	94.927	93.387
5/27/2008	5/28/2013	5/27/2011	3.490	110.583	106.051	102.407	99.466	96.852	94.386	92.013	89.715
5/29/2008	5/29/2018	5/31/2011	3.460	114.330	107.031	102.542	99.421	96.779	94.308	91.932	89.634
6/6/2008	6/6/2013	6/6/2011	3.990	113.004	108.402	104.256	100.185	95.945	91.556	87.481	83.816
6/10/2008	6/11/2012	6/10/2010	3.940	110.892	107.096	103.735	100.299	96.489	92.969	90.364	88.386
6/16/2008	6/17/2013	6/16/2011	4.070	113.342	108.548	104.452	101.136	98.302	95.720	93.270	90.913
6/24/2008	6/24/2015	6/24/2011	3.830	114.477	108.693	104.163	100.652	97.730	95.105	92.635	90.266
6/30/2008	7/1/2013	6/30/2009	2.920	107.877	103.792	101.177	99.840	99.051	98.336	97.635	96.944
6/30/2008	7/1/2013	6/30/2010	3.450	110.364	105.863	102.541	100.243	98.438	96.790	95.203	93.654
6/30/2008	6/30/2015	6/30/2010	3.370	111.693	106.392	102.687	100.219	98.313	96.588	94.931	93.314
6/30/2008	7/2/2018	6/30/2011	3.690	116.239	108.352	103.349	99.973	97.231	94.726	92.335	90.027
7/1/2008	7/1/2015	7/1/2011	4.600	119.334	112.910	107.320	101.948	96.361	91.068	86.489	82.790
7/7/2008	7/8/2013	7/7/2011	4.590	116.021	111.118	106.482	101.735	96.565	91.417	86.844	83.046
7/8/2008	7/8/2013	7/8/2011	4.250	114.396	109.630	105.281	101.026	96.578	92.132	87.916	84.145
7/10/2008	7/10/2014	7/10/2012	4.800	119.155	113.271	107.526	101.600	95.306	88.865	83.081	78.139
7/11/2008	7/11/2018	7/11/2012	3.750	117.073	109.283	103.713	99.388	95.687	92.297	89.099	86.052
7/14/2008	7/14/2015	7/15/2013	4.900	121.514	114.583	107.636	100.477	92.967	85.452	78.712	72.957
7/14/2008	7/16/2018	7/14/2009	2.500	107.701	102.951	100.530	99.394	98.540	97.713	96.902	96.104
7/14/2008	7/16/2018	7/14/2011	3.250	113.393	106.749	102.156	98.749	95.899	93.293	90.817	88.434
7/17/2008	7/17/2018	7/17/2013	3.750	117.326	109.511	103.431	98.382	93.925	89.224	85.986	82.361
7/21/2008	7/22/2013	7/21/2009	3.000	108.350	103.620	100.901	99.833	98.968	98.124	97.295	96.480
8/15/2008	8/15/2018	8/15/2011	3.830	118.358	110.670	105.035	100.880	97.588	94.736	92.115	89.629
8/19/2008	8/19/2013	8/19/2010	3.440	110.559	105.827	102.427	100.127	98.196	96.377	94.609	92.884