

## **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	8/27/2010	6.5800	111.0942	111.0942	111.0918	109.5380	107.8279	106.1651	104.5849	103.1454
4/8/1998	4/8/2013	10/8/2010	5.4900	115.4475	115.4475	114.6154	111.7229	108.9748	106.4758	104.3151	102.5507
8/19/1998	8/19/2013	8/19/2010	5.4900	117.4756	117.4756	116.0627	112.7993	109.7480	107.0164	104.6749	102.7733
8/19/1998	8/19/2013	8/19/2010	5.4900	117.4756	117.4756	116.0627	112.7993	109.7480	107.0164	104.6749	102.7733
8/25/1998	8/19/2013	7/26/2010	5.4900	117.4756	117.4756	116.0629	112.8002	109.7483	107.0134	104.6696	102.7647
8/27/1998	8/19/2013	7/27/2010	5.4900	117.4756	117.4756	116.0628	112.7996	109.7468	107.0105	104.6660	102.7597
9/30/1998	9/30/2013	9/30/2010	5.2200	117.2251	117.2251	115.5976	112.2513	109.1600	106.4246	104.1237	102.2989
12/14/1998	12/16/2013	9/14/2010	5.3900	118.9389	118.9389	116.9032	113.3398	110.0634	107.1792	104.7387	102.7844
12/14/1998	12/16/2013	9/14/2010	4.8900	117.1820	117.1820	115.1588	111.6534	108.4783	105.7373	103.5010	101.7992
12/15/1998	12/16/2013	9/15/2010	4.8800	117.1468	117.1468	115.1241	111.6196	108.4459	105.7076	103.4751	101.7774
1/7/2000	1/7/2015	10/7/2010	5.9500	127.3026	127.0867	122.4773	117.9544	113.8857	110.3315	107.3046	104.8149
8/8/2000	8/9/2010	8/9/2010	5.9900	100.6655	100.6655	100.6655	100.6368	100.5251	100.4138	100.3027	100.1919
8/18/2000	8/18/2010	8/18/2010	6.0900	100.8289	100.8289	100.8289	100.7930	100.6562	100.5198	100.3838	100.2482
10/5/2000	10/5/2010	7/5/2010	5.7100	101.5385	101.5385	101.5385	101.4568	101.1857	100.9162	100.6481	100.3814
10/10/2000	10/12/2010	7/12/2010	5.8400	101.6870	101.6870	101.6870	101.5963	101.3056	101.0166	100.7292	100.4435
10/13/2000	10/13/2010	7/13/2010	5.7500	101.6770	101.6770	101.6770	101.5850	101.2915	100.9998	100.7097	100.4214
10/23/2000	10/25/2010	7/23/2010	5.6400	101.8329	101.8329	101.8329	101.7255	101.3985	101.0736	100.7508	100.4301
12/5/2000	12/6/2010	9/7/2010	5.4100	102.3893	102.3893	102.3893	102.2118	101.7673	101.3267	100.8901	100.4691
12/11/2000	12/13/2010	9/13/2010	5.1700	102.3838	102.3838	102.3838	102.1925	101.7287	101.2692	100.8143	100.3837
12/12/2000	12/13/2010	9/13/2010	5.1100	102.3562	102.3562	102.3562	102.1648	101.7012	101.2417	100.7869	100.3609
12/15/2000	12/15/2010	9/15/2010	5.1200	102.3892	102.3892	102.3892	102.1939	101.7246	101.2597	100.7995	100.3681
12/20/2000	12/20/2010	9/20/2010	4.9500	102.3786	102.3786	102.3786	102.1735	101.6905	101.2120	100.7389	100.3086
12/21/2000	12/21/2010	9/21/2010	4.8600	102.3489	102.3489	102.3489	102.1418	101.6561	101.1750	100.7002	100.2737
1/11/2001	1/11/2011	7/11/2010	5.3700	102.9086	102.9086	102.9086	102.6573	102.1121	101.5728	101.0391	100.5112
1/12/2001	1/12/2011	7/12/2010	5.3000	102.8854	102.8854	102.8854	102.6319	102.0841	101.5421	101.0059	100.4754
2/5/2001	2/7/2011	8/5/2010	4.8200	102.9722	102.9722	102.9722	102.6603	102.0408	101.4291	100.8385	100.3231
2/7/2001	2/7/2011	8/9/2010	4.8200	102.9722	102.9722	102.9722	102.6603	102.0408	101.4291	100.8382	100.3229
2/26/2001	2/28/2011	8/26/2010	5.0600	103.4153	103.4153	103.4153	103.0521	102.3736	101.7042	101.0525	100.4688
2/26/2001	2/28/2011	8/26/2010	5.4500	103.6786	103.6786	103.6786	103.3149	102.6354	101.9648	101.3079	100.6921
2/26/2001	2/28/2011	8/26/2010	4.7900	103.2331	103.2331	103.2331	102.8701	102.1923	101.5238	100.8805	100.3314
2/27/2001	2/28/2011	8/27/2010	5.0200	103.3883	103.3883	103.3883	103.0252	102.3467	101.6775	101.0269	100.4443
2/27/2001	2/28/2011	8/27/2010	4.7600	103.2128	103.2128	103.2128	102.8499	102.1721	101.5037	100.8610	100.3158
3/1/2001	3/1/2011	9/1/2010	5.2700	103.5717	103.5717	103.5717	103.2058	102.5239	101.8514	101.1963	100.6056
3/14/2001	3/14/2011	9/14/2010	4.8600	103.4693	103.4693	103.4693	103.0717	102.3547	101.6485	100.9717	100.3969
4/23/2001	4/25/2011	4/24/2006	5.3500	104.4433	104.4433	104.4433	103.9370	103.1013	102.2791	101.4701	100.6740
6/1/2001	6/1/2011	9/1/2010	4.9900	104.6571	104.6571	104.6571	104.0506	103.1135	102.1978	101.3363	100.6142
12/13/2001	12/13/2011	9/13/2010	4.9200	107.2566	107.2566	107.2566	106.0235	104.5505	103.1374	101.8714	100.8587
6/3/2002	6/4/2012	9/3/2010	4.4900	108.7924	108.7924	108.7859	106.8408	104.8882	102.9817	101.1199	99.3016
6/4/2002	6/4/2012	9/4/2010	4.4900	108.7924	108.7924	108.7859	106.8408	104.8882	102.9817	101.1199	99.3016
12/5/2002	12/5/2012	9/7/2010	3.7900	109.3586	109.3586	108.9655	106.4704	104.0304	101.6596	99.3557	97.1164
3/6/2003	3/6/2013	9/7/2010	2.9900	108.1387	108.1387	107.4439	104.8243	102.6066	101.0150	100.1337	99.7776
2/5/2004	12/14/2010	9/14/2010	5.8200	102.6997	102.6997	102.6997	102.5061	102.0387	101.5756	101.1168	100.6691
6/18/2004	6/20/2011	9/18/2010	4.1200	104.0625	104.0625	104.0625	103.4030	102.4176	101.4510	100.5028	99.5723
7/2/2004	7/2/2014	7/4/2010	3.9900	116.2138	116.2120	112.8594	108.7343	104.7728	100.9807	97.3500	96.4640
12/13/2004	12/15/2014	9/13/2010	3.3200	115.0218	114.8651	110.8711	107.1913	104.2245	102.0304	100.6358	99.9440
7/18/2005	7/19/2010	7/19/2010	4.1600	100.2195	100.2195	100.2195	100.2063	100.1534	100.1006	100.0478	99.9951
9/1/2005	9/1/2015	9/1/2010	4.1300	121.6696	119.9575	114.5826	109.2989	104.2856	99.5389	95.9110	95.0430
9/19/2005	9/19/2012	9/20/2010	3.8200	108.6156	108.6156	108.4110	106.1465	104.0240	102.2233	100.8906	100.0971
9/26/2005	9/26/2012	9/27/2010	3.8900	108.8492	108.8492	108.6275	106.3412	104.1944	102.3599	100.9796	100.1359
9/30/2005	9/30/2015	9/30/2010	4.4400	123.6539	121.7401	116.2531	110.8528	105.7311	100.8849	96.2978	95.5344
10/26/2005	10/26/2015	7/26/2010	4.5400	124.5145	122.4206	116.8466	111.3640	106.1674	101.2534	96.8900	96.6050
10/28/2005	10/28/2015	7/28/2010	4.3100	123.2965	121.3660	116.4218	111.9263	108.1504	105.1016	102.7684	101.1272
10/28/2005	10/28/2015	7/28/2010	4.1400	122.3775	120.4628	115.5822	111.1665	107.4829	104.5433	102.3387	100.8494
11/4/2005	11/4/2010	8/4/2010	4.5200	101.5945	101.5945	101.5945	101.4729	101.1187	100.7670	100.4177	100.1072
11/21/2005	11/21/2012	8/23/2010	4.2900	110.4264	110.4264	110.0673	107.6103	105.2900	103.2631	101.6571	100.5579
1/6/2006	1/6/2016	10/6/2010	4.0200	122.5105	120.2025	115.2474	110.8198	107.1613	104.2772	102.1520	100.7604
1/17/2006	1/19/2016	7/19/2010	4.0800	122.9938	120.5840	115.5831	111.1063	107.3973	104.4589	102.2731	100.8172
3/20/2006	3/21/2011	9/21/2010	4.7600	103.4905	103.4905	103.4905	103.0757	102.3395	101.6138	100.8985	100.1932
4/11/2006	4/11/2011	7/12/2010	4.9800	103.9423	103.9423	103.9423	103.4736	102.6782	101.8967	101.1497	100.5086
4/19/2006	4/19/2013	7/19/2010	4.6300	113.1690	113.1690	112.2986	109.4211	106.7457	104.4064	102.5037	101.0973
4/24/2006	4/25/2016	7/26/2010	4.4400	126.2190	123.1149	117.7969	113.0176	109.0180	105.7796	103.2726	101.4726
4/28/2006	4/28/2011	7/28/2010	5.0900	104.2697	104.2697	104.2697	103.7561	102.9130	102.0837	101.2678	100.4650
5/5/2006	5/6/2013	8/5/2010	4.7800	113.8214	113.8214	112.8855	109.9535	107.2235	104.8274	102.8577	101.3760
5/5/2006	5/5/2016	8/5/2010	4.9800	129.5463	126.2953	120.7610	115.7183	111.4171	107.8474	104.9819	102.7940
5/5/2006	5/5/2016	8/5/2010	4.3500	125.8083	122.6568	117.3690	112.6329	108.6851	105.5101	103.0784	101.3593
5/5/2006	5/5/2016	8/5/2010	4.5300	126.8763	123.6929	118.3311	113.5020	109.4477	106.1547	103.5938	101.7352
5/9/2006	5/9/2011	8/9/2010	5.0500	104.3905	104.3905	104.3905	103.8470	102.9735	102.1172	101.3025	100.6027
5/15/2006	5/16/2016	8/16/2010	4.3500	125.9413	122.7126	117.4023	112.6488	108.6873	105.5014	103.0583	101.3288
5/15/2006	5/16/2016	8/16/2010	4.5200	126.9551	123.6957	118.3143	113.4720	109.4092	106.1102	103.5461	101.6842
5/19/2006	5/19/2016	8/19/2010	4.5100	126.9330	123.6545	118.2706	113.4277	109.3665	106.0692	103.5069	101.6478
6/12/2006	6/13/2016	9/13/2010	4.6200	127.9108	124.4521	118.9774	114.0512	109.9064	106.5267	103.8812	101.9378

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
6/26/2006	6/27/2016	9/27/2010	4.7300	128.7593	125.1896	119.6317	114.6275	110.4004	106.9332	104.1935	102.1551
6/28/2006	6/28/2013	9/28/2010	4.9500	115.0417	115.0417	113.9023	110.8127	107.9371	105.4067	103.3020	101.6772
6/30/2006	7/1/2013	9/30/2010	4.8900	114.9001	114.9001	113.7484	110.6565	107.7868	105.2689	103.1806	101.5788
7/14/2006	7/15/2013	7/14/2010	4.8900	115.0903	115.0903	113.8657	110.7382	107.8432	105.3099	103.2171	101.6228
7/19/2006	7/19/2011	7/19/2010	5.2500	105.5997	105.5997	105.5997	104.8460	103.7746	102.7291	101.7408	100.8863
7/20/2006	7/20/2011	7/20/2010	5.3000	105.6678	105.6678	105.6678	104.9107	103.8361	102.7823	101.7488	100.7349
7/24/2006	7/25/2016	7/26/2010	4.6600	128.6961	124.9360	119.3621	114.3556	110.1464	106.7065	104.0070	102.0095
7/28/2006	7/28/2016	7/28/2010	4.4900	127.6866	123.9385	118.4308	113.5104	109.3972	106.0676	103.4824	101.6124
8/1/2006	8/1/2016	8/2/2010	4.8900	130.2076	126.3595	120.6881	115.5679	111.2303	107.6534	104.8043	102.6516
8/11/2006	8/11/2011	8/11/2010	4.7900	105.4151	105.4151	105.4151	104.5883	103.4568	102.3606	101.3620	100.5621
8/21/2006	8/21/2013	8/22/2010	4.7500	115.1464	115.1464	113.7250	110.4482	107.2670	104.1966	101.2324	99.0914
8/25/2006	8/25/2016	8/25/2010	4.3500	127.1616	123.2492	117.7635	112.8890	108.8420	105.5942	103.1035	101.3363
8/28/2006	8/29/2011	9/1/2010	4.8900	105.7726	105.7726	105.7726	104.8869	103.7048	102.5453	101.4079	100.2918
9/22/2006	9/22/2011	9/22/2010	4.7900	105.9739	105.9739	105.9739	105.0103	103.7636	102.5608	101.4726	100.6091
9/29/2006	9/29/2011	9/29/2010	4.5900	105.8137	105.8137	105.8137	104.8283	103.5647	102.3507	101.2725	100.4579
10/10/2006	10/10/2013	7/12/2010	4.2500	114.1422	114.1422	112.4825	109.2189	106.3088	103.8785	102.0095	100.7363
10/12/2006	10/15/2013	7/12/2010	4.5000	115.0366	115.0366	113.3443	110.0370	107.0583	104.5284	102.5209	101.0770
10/30/2006	10/31/2011	7/30/2010	4.8500	106.5741	106.5741	106.5741	105.4828	104.1273	102.7979	101.4938	100.2144
10/30/2006	10/31/2011	7/30/2010	4.8500	106.5741	106.5741	106.5741	105.4828	104.1273	102.7979	101.4938	100.2144
11/3/2006	11/3/2011	8/8/2010	4.6900	106.3963	106.3963	106.3963	105.2961	103.9339	102.5979	101.2874	100.0017
11/6/2006	11/6/2013	8/6/2010	4.2900	114.5970	114.5970	112.7978	109.4674	106.5053	104.0333	102.1240	100.8080
11/10/2006	11/13/2012	8/10/2010	4.3900	110.5720	110.5720	110.2324	107.7949	105.4856	103.4536	101.8242	100.6757
11/17/2006	11/18/2013	8/17/2010	4.3500	114.9462	114.9462	113.0829	109.7143	106.7128	104.1991	102.2396	100.8710
11/24/2006	11/25/2016	8/24/2010	4.1900	127.2332	122.7365	117.1839	112.3063	108.2978	105.1161	102.7201	101.0732
11/30/2006	12/2/2013	9/1/2010	4.3500	115.1153	115.1153	113.1544	109.6009	106.1644	102.8567	100.5668	98.8559
12/1/2006	12/1/2016	9/1/2010	4.0900	126.6513	122.1574	116.6618	111.8518	107.9181	104.8207	102.5255	100.9863
12/4/2006	12/5/2016	9/7/2010	4.0800	126.6315	122.1140	116.6158	111.8080	107.8767	104.7840	102.4924	100.9574
12/5/2006	12/5/2016	9/7/2010	4.2600	127.8065	123.2293	117.6317	112.7085	108.6539	105.4262	102.9787	101.2741
12/6/2006	12/6/2013	9/7/2010	4.4000	115.3380	115.3380	113.3818	109.9686	106.9297	104.3835	102.3896	100.9871
12/8/2006	12/8/2016	9/8/2010	3.9900	126.0773	121.5709	116.1176	111.3646	107.4928	104.4686	102.2534	100.8090
12/12/2006	12/12/2016	9/13/2010	3.9900	126.1216	121.5879	116.1261	111.3684	107.4924	104.4642	102.2435	100.7944
12/12/2006	12/12/2016	9/13/2010	4.0500	126.5144	121.9599	116.4619	111.6648	107.7454	104.6693	102.3974	100.8881
12/19/2006	12/19/2011	9/20/2010	4.4900	106.6972	106.6972	106.6972	105.4477	103.9650	102.5622	101.3543	100.4758
12/19/2006	12/19/2016	9/20/2010	4.1900	127.5125	122.8627	117.2688	112.3688	108.3472	105.1549	102.7526	101.1016
12/20/2006	12/20/2013	9/20/2010	4.5000	115.8616	115.8616	113.8294	110.3669	107.2736	104.6659	102.5984	101.1079
12/21/2006	12/21/2011	9/21/2010	4.5300	106.7820	106.7820	106.7820	105.5256	104.0367	102.6261	101.4061	100.5089
12/27/2006	12/27/2013	9/27/2010	4.5000	115.9491	115.9491	113.8806	110.4014	107.2939	104.6738	102.5954	101.0958
12/28/2006	12/28/2016	9/28/2010	4.2500	128.0127	123.2831	117.6333	112.6810	108.6088	105.3627	102.8995	101.1866
12/28/2006	12/28/2016	9/28/2010	4.4000	129.0015	124.2231	118.4953	113.4493	109.2718	105.9191	103.3355	101.4927
1/8/2007	1/9/2012	7/8/2010	4.7500	107.3621	107.3621	107.3617	106.0330	104.4850	102.9678	101.4806	100.0224
1/12/2007	1/12/2017	7/12/2010	4.4200	129.3175	124.4272	118.6745	113.6077	109.4113	106.0441	103.4507	101.5972
1/16/2007	1/17/2017	1/17/2012	4.7900	131.8383	126.7974	120.8485	115.5583	111.1125	107.4497	104.4373	101.9399
1/23/2007	1/23/2014	7/23/2010	4.4900	116.2503	116.2503	114.0138	110.4819	107.3403	104.6977	102.6070	101.1022
1/23/2007	1/23/2017	7/23/2010	4.4600	129.7191	124.7266	118.9327	113.8265	109.5885	106.1805	103.5457	101.6454
1/29/2007	1/29/2014	7/29/2010	4.7900	117.4160	117.4160	115.0976	111.3521	107.7345	104.2573	100.9143	99.2747
2/2/2007	2/2/2017	8/2/2010	4.6900	131.3820	125.6226	118.6550	111.9512	105.6755	103.0208	100.5607	99.2959
2/9/2007	2/9/2012	8/9/2010	4.7500	107.7711	107.7711	107.7694	106.3106	104.6829	103.1456	101.8050	100.7747
2/9/2007	2/9/2017	8/9/2010	4.4700	129.9968	124.8791	119.0625	113.9371	109.6854	106.2675	103.6294	101.7273
2/12/2007	2/13/2012	8/12/2010	4.8800	108.0380	108.0380	108.0362	106.5592	104.9178	103.3618	101.9898	100.9057
2/15/2007	2/15/2012	8/16/2010	4.9900	108.2469	108.2469	108.2450	106.7585	105.1041	103.4842	101.8978	100.3439
2/20/2007	2/21/2017	8/20/2010	4.3900	129.6062	124.4227	118.6269	113.5322	109.3247	105.9505	103.3614	101.5132
2/20/2007	2/21/2017	2/21/2012	4.8500	132.7086	126.7701	119.8161	113.7549	109.0148	105.5508	102.8936	100.7512
2/23/2007	2/23/2017	8/23/2010	4.2500	128.6856	123.5380	117.8152	112.8078	108.6923	105.4235	102.9463	101.2149
2/23/2007	2/23/2017	8/23/2010	4.3500	129.3606	124.1759	118.3968	113.3240	109.1406	105.7946	103.2358	101.4194
3/2/2007	3/2/2012	9/2/2010	4.4900	107.6201	107.6201	107.6175	106.0690	104.3898	102.8307	101.5208	100.5745
3/9/2007	3/10/2014	9/9/2010	4.4500	116.6741	116.6741	114.1486	110.5372	107.3503	104.6895	102.6014	101.1124
3/16/2007	3/16/2017	9/16/2010	4.0900	127.8442	122.6210	116.9605	112.0449	108.0346	104.8803	102.5399	100.9664
3/20/2007	3/20/2012	9/20/2010	4.5500	107.9494	107.9494	107.9461	106.3210	104.5784	102.8736	101.2055	99.5731
3/21/2007	3/21/2017	9/21/2010	4.2200	128.7878	123.4777	117.7272	112.7129	108.6068	105.3465	102.8840	101.1814
3/23/2007	3/23/2017	9/23/2010	4.2900	129.2892	123.9373	118.1426	113.0795	108.9193	105.6056	103.0817	101.3117
3/23/2007	3/23/2017	9/23/2010	4.2900	129.2892	123.9373	118.1426	113.0795	108.9193	105.6056	103.0817	101.3117
3/30/2007	3/30/2012	9/21/2010	4.6700	108.2888	108.2888	108.2851	106.6165	104.8442	103.1108	101.4152	99.7563
4/2/2007	4/2/2012	10/4/2010	4.5900	108.1850	108.1850	108.1812	106.5013	104.7372	103.1007	101.7172	100.6925
4/9/2007	4/10/2017	10/12/2010	4.1500	128.5408	123.1238	117.3907	112.4133	108.3460	105.1351	102.7351	101.0928
4/12/2007	4/12/2017	7/12/2010	4.2500	129.2522	123.7763	117.9802	112.9279	108.7878	105.4976	103.0084	101.2743
4/13/2007	4/13/2017	7/13/2010	4.4500	130.6412	125.0785	119.1654	113.9811	109.6953	106.2554	103.6051	101.6997
4/23/2007	4/23/2012	7/25/2010	4.6500	108.5633	108.5633	108.5585	106.7888	104.9500	103.1527	101.3957	99.6777
4/23/2007	4/23/2014	7/23/2010	4.6200	117.8758	117.8758	115.0581	111.3245	108.0204	105.2379	103.0177	101.3849
4/27/2007	4/27/2012	7/27/2010	4.5500	108.4297	108.4297	108.4247	106.6399	104.8090	103.1160	101.6893	100.6382
4/27/2007	4/27/2017	7/27/2010	4.2500	129.4293	123.8325	118.0100	112.9380	108.7782	105.4737	102.9721	101.2247
5/2/2007	5/2/2014	8/2/2010	4.5900	117.8744	117.8744	115.0034	111.2630	107.9640	105.1959	103.0024	101.4016

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
5/4/2007	5/5/2014	8/4/2010	4.5500	117.7566	117.7566	114.8690	111.1304	107.8376	105.0827	102.9060	101.3276
5/14/2007	5/16/2011	8/16/2010	4.5000	103.9998	103.9998	103.9998	103.4383	102.5477	101.6791	100.8839	100.2737
5/18/2007	5/18/2017	8/18/2010	4.1900	129.2582	123.5377	117.7297	112.6807	108.5538	105.2915	102.8385	101.1474
5/22/2007	5/22/2012	8/23/2010	4.6900	109.0147	109.0147	109.0088	107.1163	105.2147	103.4540	101.9512	100.8170
5/22/2007	5/22/2012	8/23/2010	4.7100	109.0532	109.0532	109.0472	107.1544	105.2521	103.4892	101.9816	100.8386
5/22/2007	5/22/2017	5/22/2012	4.7500	133.2216	127.2460	121.1037	115.6828	111.1454	107.3792	104.2371	101.5572
5/25/2007	5/25/2012	8/25/2010	4.6500	108.9766	108.9766	108.9705	107.0659	105.1575	103.3935	101.8954	100.7714
5/29/2007	5/30/2017	8/30/2010	4.2500	129.8188	123.9854	118.1181	113.0116	108.8270	105.5074	102.9893	101.2290
6/1/2007	6/1/2012	6/2/2008	5.2300	110.1980	110.1980	110.1916	108.2486	106.3042	104.4795	102.8742	101.5779
6/1/2007	6/2/2014	9/1/2010	4.5000	117.9114	117.9114	114.8500	111.0675	107.7547	104.9967	102.8296	101.2743
6/7/2007	6/7/2012	9/7/2010	4.9400	109.7148	109.7148	109.7082	107.7440	105.7919	103.9741	102.3975	101.1662
6/7/2007	6/7/2017	9/7/2010	4.8200	133.9254	127.8148	121.6126	116.1378	111.5585	107.8209	104.8715	102.6541
6/8/2007	6/8/2012	6/9/2008	5.3000	110.4375	110.4375	110.4309	108.4568	106.4906	104.6417	103.0059	101.6742
6/8/2007	6/9/2014	9/8/2010	4.7300	118.9189	118.9189	115.7925	111.9464	108.5502	105.6804	103.3862	101.6777
6/8/2007	6/8/2017	9/8/2010	4.4900	131.6151	125.6237	119.6060	114.3387	109.9832	106.4847	103.7858	101.8354
6/11/2007	6/12/2017	9/13/2010	4.4900	131.6650	125.6431	119.6173	114.3447	109.9855	106.4826	103.7796	101.8234
6/15/2007	6/16/2014	6/16/2008	5.5500	122.3068	122.3068	119.0812	115.0760	111.4541	108.2884	105.6218	103.4702
6/18/2007	6/19/2017	9/20/2010	4.5000	131.8230	125.7455	119.6964	114.4062	110.0318	106.5132	103.7958	101.8236
6/18/2007	6/19/2017	9/20/2010	4.8400	134.2275	128.0161	121.7745	116.2692	111.6615	107.8960	104.9182	102.6722
6/19/2007	6/19/2017	9/20/2010	4.6500	132.8838	126.7445	120.6084	115.2230	110.7417	107.1137	104.2761	102.1860
6/20/2007	6/20/2012	9/20/2010	4.8900	109.7931	109.7931	109.7859	107.7672	105.7813	103.9366	102.3406	101.0980
6/20/2007	6/20/2012	9/20/2010	4.9600	109.9333	109.9333	109.9261	107.9062	105.9176	104.0649	102.4538	101.1895
6/22/2007	6/22/2017	9/22/2010	4.5000	131.8605	125.7612	119.7035	114.4074	110.0288	106.5068	103.7866	101.8126
6/26/2007	6/26/2012	9/27/2010	5.1300	110.3592	110.3592	110.3518	108.3035	106.2915	104.4054	102.7493	101.4159
6/28/2007	6/28/2017	9/28/2010	4.5000	131.9355	125.7925	119.7191	114.4139	110.0290	106.5003	103.7746	101.7939
7/13/2007	7/13/2012	7/13/2010	4.6900	109.6921	109.6921	109.6529	107.5578	105.5213	103.6555	102.0800	100.8957
7/13/2007	7/13/2017	7/13/2010	4.2900	130.5623	124.4671	118.5093	113.3365	109.1014	105.7364	103.1795	101.3845
7/13/2007	7/13/2017	7/13/2011	4.9000	134.9169	128.5645	122.2501	116.6796	112.0132	108.1899	105.1331	102.7170
7/18/2007	7/18/2017	7/19/2010	4.7800	134.1030	127.7763	121.5189	116.0163	111.4238	107.6858	104.7378	102.5347
7/19/2007	7/19/2012	7/19/2010	4.8900	110.1870	110.1870	110.1332	108.0169	105.9557	104.0514	102.4119	101.1395
7/20/2007	7/20/2017	7/20/2010	4.2900	130.6127	124.4919	118.5225	113.3394	109.0963	105.7235	103.1614	101.3597
7/23/2007	7/23/2012	7/23/2010	5.0500	110.5764	110.5764	110.5129	108.3824	106.3054	104.3788	102.7123	101.3940
7/24/2007	7/24/2012	7/26/2010	4.8200	110.1081	110.1081	110.0421	107.9127	105.8413	103.9338	102.3010	101.0438
7/27/2007	7/27/2012	7/27/2010	4.5900	109.6640	109.6640	109.5908	107.4573	105.3898	103.5056	101.9327	100.7724
7/27/2007	7/28/2014	7/27/2010	4.3500	117.9910	117.9650	114.5623	110.7105	107.3678	104.6147	102.4838	100.9859
7/27/2007	7/27/2017	7/27/2010	4.2500	130.3763	124.2491	118.2933	113.1292	108.9079	105.5587	103.0250	101.2542
7/27/2007	7/27/2017	7/27/2010	4.1800	129.8739	123.7813	117.8691	112.7578	108.5870	105.2955	102.8243	101.1196
7/30/2007	1/30/2019	7/30/2010	3.9900	131.7815	124.5816	118.1042	112.6699	108.3352	104.9916	102.5533	100.9440
7/31/2007	7/31/2017	8/2/2010	3.9900	128.5361	122.5386	116.7499	111.7733	107.7446	104.6149	102.3292	100.8368
7/31/2007	7/31/2017	8/2/2010	3.9900	128.5361	122.5386	116.7499	111.7733	107.7446	104.6149	102.3292	100.8368
7/31/2007	7/31/2017	8/2/2010	4.0600	129.0393	123.0045	117.1682	112.1398	108.0563	104.8666	102.5132	100.9544
8/2/2007	8/4/2014	8/2/2010	4.4900	118.6573	118.6248	115.1673	111.2752	107.8856	105.0768	102.8753	101.2921
8/2/2007	8/2/2017	8/2/2010	4.1500	129.7000	123.6190	117.7331	112.6479	108.5065	105.2505	102.8179	101.1546
8/2/2007	8/2/2017	8/2/2010	4.0500	128.9807	122.9517	117.1338	112.1217	108.0584	104.8836	102.5411	100.9773
8/6/2007	8/6/2012	8/6/2010	4.4900	109.5781	109.5781	109.4806	107.3209	105.2382	103.3603	101.8196	100.7072
8/9/2007	8/11/2014	8/9/2011	4.8600	120.2894	120.2503	116.7077	112.7152	109.1912	106.2014	103.7429	101.7420
8/9/2007	8/9/2017	8/9/2010	3.9900	128.5950	122.5738	116.7858	111.8076	107.7849	104.6551	102.3640	100.8535
8/13/2007	8/13/2012	8/13/2010	4.5900	109.8807	109.8807	109.7661	107.5841	105.4774	103.5674	101.9795	100.8108
8/16/2007	8/16/2017	8/16/2010	3.9900	128.6417	122.5965	116.7958	111.8080	107.7790	104.6420	102.3462	100.8334
8/17/2007	8/17/2012	8/17/2010	4.3500	109.4124	109.4124	109.2881	107.1000	104.9992	103.1229	101.6111	100.5568
8/17/2007	8/17/2012	8/17/2010	4.1500	108.9796	108.9796	108.8553	106.6724	104.5871	102.7529	101.3128	100.3704
8/17/2007	8/17/2017	8/17/2010	4.0000	128.7208	122.6669	116.8575	111.8608	107.8224	104.6762	102.3701	100.8462
8/20/2007	8/20/2010	8/20/2010	4.5900	100.6502	100.6502	100.6502	100.6128	100.4707	100.3290	100.1877	100.0468
8/20/2007	8/20/2014	8/20/2010	4.2500	117.8489	117.8015	114.2274	110.3236	106.9451	104.1690	102.0170	100.5606
8/24/2007	8/24/2010	8/24/2010	4.4600	100.6814	100.6814	100.6814	100.6408	100.4875	100.3348	100.1825	100.0307
8/24/2007	8/24/2012	8/24/2010	4.0500	108.8419	108.8419	108.7006	106.5006	104.4071	102.5810	101.1685	100.2714
8/28/2007	8/28/2014	8/30/2010	4.3500	118.3655	118.3107	114.7163	110.8111	107.4368	104.6591	102.5082	100.9973
8/30/2007	8/30/2012	8/30/2010	4.3900	109.6574	109.6574	109.5015	107.2755	105.1387	103.2270	101.6767	100.5859
8/30/2007	9/2/2014	8/30/2010	3.8900	116.4773	116.4179	112.8649	109.0880	105.8992	103.3659	101.5227	100.3820
8/31/2007	8/31/2012	8/31/2010	4.3700	109.6256	109.6256	109.4672	107.2389	105.1012	103.1915	101.6474	100.5661
9/4/2007	9/4/2012	9/7/2010	4.1900	109.2756	109.2756	109.1075	106.8736	104.7459	102.8796	101.4139	100.4421
9/4/2007	9/4/2012	9/7/2010	4.2200	109.3420	109.3420	109.1739	106.9392	104.8090	102.9360	101.4584	100.4705
9/4/2007	9/5/2017	9/7/2010	3.8900	128.0527	122.0158	116.2650	111.3458	107.3895	104.3367	102.1307	100.7249
9/6/2007	9/7/2010	9/7/2010	4.1600	100.7973	100.7973	100.7973	100.7444	100.5522	100.3607	100.1700	99.9800
9/7/2007	9/7/2012	9/7/2010	4.0900	109.0883	109.0883	108.9129	106.6734	104.5491	102.6995	101.2704	100.3488
9/10/2007	9/11/2017	9/10/2010	3.6900	126.6366	120.7006	115.0903	110.3171	106.5254	103.6448	101.6268	100.4133
9/11/2007	9/13/2010	9/11/2010	4.4300	100.9229	100.9229	100.9229	100.8642	100.6552	100.4470	100.2397	100.0333
9/11/2007	9/11/2017	9/13/2010	3.5900	125.9075	120.0369	114.5034	109.8125	106.1050	103.3211	101.3946	100.2722
9/12/2007	9/12/2014	9/13/2010	3.6900	115.7326	115.6638	112.0951	108.3754	105.2825	102.8785	101.1880	100.2011
9/13/2007	9/15/2014	9/13/2010	3.9900	117.0450	116.9734	113.3310	109.5106	106.2704	103.6801	101.7750	100.5535

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
9/13/2007	9/13/2017	9/13/2010	3.9900	128.8379	122.7168	116.8742	111.8679	107.8222	104.6746	102.3708	100.8588
9/14/2007	9/14/2011	9/14/2010	4.0900	105.0099	105.0099	105.0099	104.0758	102.8587	101.7120	100.7584	100.1259
9/14/2007	9/14/2012	9/14/2010	4.3900	109.8403	109.8403	109.6477	107.3800	105.2105	103.2807	101.7227	100.6309
9/17/2007	9/17/2012	9/17/2010	4.2200	109.4944	109.4944	109.2945	107.0232	104.8606	102.9596	101.4605	100.4540
9/27/2007	9/27/2010	9/28/2010	4.2500	101.0506	101.0506	101.0506	100.9784	100.7304	100.4836	100.2381	99.9937
9/27/2007	9/29/2014	9/27/2010	4.4900	119.3557	119.2709	115.2728	110.8611	106.6366	102.8894	100.8455	100.1232
9/27/2007	9/27/2017	9/27/2010	3.6500	126.4507	120.4894	114.8728	110.1136	106.3415	103.4882	101.4904	100.2965
9/28/2007	9/28/2010	6/28/2010	4.2900	101.0724	101.0724	101.0724	100.9993	100.7485	100.4989	100.2506	100.0035
9/28/2007	9/28/2012	9/28/2010	3.8500	108.7795	108.7795	108.5530	106.2628	104.1156	102.2889	100.9266	100.1025
10/3/2007	10/3/2012	10/4/2010	3.8300	108.7871	108.7871	108.5484	106.2464	104.0969	102.2817	100.9426	100.1799
10/9/2007	10/9/2012	10/9/2009	4.4000	110.1683	110.1683	109.9145	107.5687	105.2672	103.0276	100.8478	98.7258
10/11/2007	10/14/2014	7/12/2010	4.1800	118.1934	118.0947	114.2476	110.3267	106.9735	104.2575	102.2053	100.8189
10/11/2007	10/11/2017	7/12/2010	3.9900	129.0355	122.8326	116.9513	111.9222	107.8595	104.7025	102.3881	100.8645
10/15/2007	10/16/2017	7/15/2010	3.9900	129.0666	122.8482	116.9603	111.9246	107.8568	104.6950	102.3759	100.8499
10/22/2007	10/22/2012	7/22/2010	3.9900	109.3648	109.3648	109.0795	106.7172	104.5016	102.6005	101.1545	100.2488
10/25/2007	10/27/2014	10/25/2011	4.3600	119.1344	119.0234	115.0610	111.0593	107.6107	104.7545	102.4322	100.5156
10/26/2007	10/26/2017	7/26/2010	3.3900	124.6871	118.8338	113.4096	108.8550	105.2989	102.6831	100.9491	100.1119
10/29/2007	10/29/2012	7/29/2010	3.9900	109.4424	109.4424	109.1400	106.7579	104.5246	102.6092	101.1507	100.2416
11/2/2007	11/3/2014	8/2/2010	3.9900	117.5881	117.4706	113.5390	109.6494	106.3671	103.7511	101.8315	100.5983
11/2/2007	11/3/2014	11/2/2010	4.1900	118.4697	118.3522	114.3821	110.4277	107.0554	104.3254	102.2629	100.8570
11/5/2007	11/5/2014	8/5/2010	3.9900	117.6102	117.4909	113.5466	109.6535	106.3673	103.7481	101.8241	100.5894
11/5/2007	11/6/2017	11/5/2012	4.3900	132.1788	125.6812	119.4972	114.1359	109.6755	105.9332	102.7212	99.8947
11/6/2007	11/6/2017	8/6/2010	3.4800	125.4102	119.4740	113.9747	109.3414	105.7050	103.0088	101.1843	100.1879
11/9/2007	11/10/2014	11/9/2011	4.3300	119.1711	119.0469	115.0066	110.9958	107.5503	104.7007	102.3737	100.4413
11/13/2007	11/14/2011	8/13/2010	3.7600	105.2428	105.2428	105.2428	104.1126	102.7393	101.4919	100.5366	100.0212
11/13/2007	11/13/2012	8/13/2010	3.6800	108.8620	108.8620	108.5231	106.1146	103.8971	102.0682	100.7643	100.0651
11/13/2007	11/13/2014	8/13/2010	3.3500	114.8598	114.7331	110.9011	107.2420	104.2808	102.0797	100.6571	100.0016
11/19/2007	11/19/2014	8/19/2010	3.7500	116.6967	116.5643	112.5879	108.7551	105.5672	103.0805	101.3121	100.2692
11/19/2007	11/19/2014	8/19/2010	3.7500	116.6967	116.5643	112.5879	108.7551	105.5672	103.0805	101.3121	100.2692
11/19/2007	11/19/2014	11/21/2011	4.2700	119.0122	118.8796	114.7921	110.7813	107.3481	104.5125	102.1950	100.2653
11/19/2007	11/20/2017	11/19/2012	4.2900	131.4937	123.8329	117.0990	111.6461	107.4847	104.1089	101.2592	98.7336
11/20/2007	11/20/2017	11/22/2010	3.7400	127.4278	121.2639	115.5275	110.6589	106.7802	103.8256	101.7333	100.3913
11/23/2007	11/24/2017	11/23/2011	3.9900	129.2695	121.5995	114.2294	108.5743	104.9237	102.4342	100.6390	99.1317
11/23/2007	11/24/2017	11/23/2011	3.9900	129.2695	121.5995	114.2294	108.5743	104.9237	102.4342	100.6390	99.1317
11/29/2007	11/29/2017	8/30/2010	2.9500	121.5717	116.0143	110.9749	106.8028	103.6625	101.5044	100.2751	99.8057
11/30/2007	11/30/2017	8/30/2010	3.1900	123.3708	117.5998	112.3288	107.9322	104.5456	102.1196	100.6129	99.9265
12/6/2007	12/6/2017	9/7/2010	3.2500	123.8535	118.0267	112.6956	108.2492	104.8159	102.3399	100.7691	99.9946
12/7/2007	12/7/2012	9/7/2010	3.4500	108.5381	108.5381	108.1408	105.6815	103.4630	101.6985	100.5321	99.9497
12/10/2007	12/10/2010	9/10/2010	3.8700	101.7521	101.7521	101.7521	101.5673	101.1135	100.6639	100.2462	99.9448
12/10/2007	12/11/2017	12/10/2010	3.4500	125.3830	119.3818	113.8636	109.2267	105.6061	102.9222	101.1075	99.9934
12/11/2007	12/11/2012	9/13/2010	3.7600	109.3471	109.3471	108.9395	106.4510	104.1650	102.2695	100.8987	100.1002
12/14/2007	12/14/2010	9/14/2010	3.6900	101.7116	101.7116	101.7116	101.5190	101.0543	100.5943	100.1808	99.8878
12/20/2007	12/20/2012	9/10/2010	3.7500	109.4160	109.4160	108.9861	106.4491	103.9697	101.5615	99.2222	96.9494
12/20/2007	12/20/2012	9/20/2010	3.6000	109.0393	109.0393	108.6099	106.1060	103.8255	101.9759	100.6874	99.9950
12/24/2007	12/26/2017	12/24/2012	3.9900	129.4714	121.7184	115.3391	110.2464	106.2731	103.0744	100.2917	97.7697
12/26/2007	12/26/2012	9/27/2010	3.4600	108.7455	108.7455	108.3015	105.7903	103.5262	101.7211	100.5210	99.8988
12/26/2007	12/26/2012	12/27/2010	3.9600	110.0093	110.0093	109.5646	107.0239	104.6712	102.6777	101.1676	100.1286
1/2/2008	1/2/2013	10/4/2010	3.4900	108.8891	108.8891	108.4255	105.8967	103.6211	101.8088	100.5964	100.0542
1/3/2008	1/5/2015	1/3/2011	3.6500	116.7279	116.5256	112.3399	108.4937	105.3274	102.8895	101.1643	100.0359
1/4/2008	1/4/2018	1/4/2011	3.3600	124.8396	118.8572	113.3871	108.8234	105.2722	102.6740	100.9367	99.8380
1/7/2008	1/7/2013	10/7/2010	2.9900	107.6571	107.6571	107.1761	104.6778	102.5298	100.9785	100.1425	99.9755
1/7/2008	1/7/2013	1/7/2011	3.5900	109.1937	109.1937	108.7111	106.1624	103.8548	101.9935	100.6728	99.7832
1/7/2008	1/7/2015	1/7/2011	3.4900	116.0140	115.7996	111.6609	107.8820	104.7972	102.4668	100.8707	99.8403
1/7/2008	1/8/2018	10/7/2010	2.5900	119.0349	113.7836	109.1001	105.2780	102.5231	100.7917	100.0578	99.9677
1/8/2008	1/8/2013	10/8/2010	3.1500	108.0756	108.0756	107.5904	105.0732	102.8752	101.2264	100.2299	99.9755
1/8/2008	1/8/2018	10/8/2010	2.5700	118.8812	113.6530	108.9932	105.1931	102.4601	100.7529	100.0437	99.9627
1/8/2008	1/8/2018	10/8/2010	2.6400	119.4091	114.1040	109.3637	105.4889	102.6783	100.8791	100.0845	99.9642
1/10/2008	1/10/2011	7/12/2010	3.1000	101.6704	101.6704	101.6704	101.4227	100.8841	100.3653	100.0244	99.9617
1/11/2008	1/11/2018	7/12/2010	2.7200	120.0199	114.6186	109.7888	105.8335	102.9287	101.0348	100.1270	99.9490
1/14/2008	1/16/2018	1/14/2011	3.2400	123.9725	118.0651	112.6979	108.2292	104.7863	102.3013	100.6784	99.6457
1/16/2008	1/16/2013	7/16/2010	2.6900	106.9560	106.9560	106.4431	103.9611	101.9170	100.5563	99.9948	99.9307
1/16/2008	1/16/2013	7/16/2010	2.5500	106.5939	106.5939	106.0819	103.6231	101.6413	100.3987	99.9689	99.9245
1/16/2008	1/16/2015	7/16/2010	2.6400	112.1795	111.9125	108.1233	104.7782	102.2834	100.6887	100.0202	99.9285
1/16/2008	1/16/2018	7/16/2010	2.3800	117.4595	112.4431	108.0095	104.4166	101.8957	100.4341	99.9613	99.9170
1/17/2008	1/17/2018	7/19/2010	2.2500	116.4813	111.6263	107.3639	103.9091	101.5520	100.2567	99.9473	99.8947
1/18/2008	1/18/2013	7/19/2010	2.5500	106.6081	106.6081	106.0887	103.6258	101.6422	100.3988	99.9631	99.9105
1/18/2008	1/20/2015	7/19/2010	2.3500	110.8675	110.5789	106.9665	103.8139	101.5704	100.2968	99.9525	99.8999
1/18/2008	1/18/2018	7/19/2010	2.2900	116.7836	111.8754	107.5599	104.0617	101.6521	100.3079	99.9494	99.8968
1/24/2008	1/24/2012	7/26/2010	2.4400	103.8833	103.8833	103.8823	102.5155	101.0952	100.1783	99.9416	99.8697
1/24/2008	1/24/2013	7/26/2010	2.5000	106.5202	106.5202	105.9792	103.5128	101.5468	100.3368	99.9459	99.8740
1/25/2008	1/25/2013	1/25/2011	2.6500	106.9188	106.9188	106.3696	103.7646	101.5051	100.2538	99.5622	98.9835

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
1/25/2008	1/25/2013	1/25/2011	2.2500	105.8743	105.8743	105.3259	102.7311	100.2051	97.7544	95.3764	93.0684
1/28/2008	1/28/2013	1/28/2011	2.9900	107.8315	107.8315	107.2704	104.6457	102.2342	100.6591	99.7853	99.1705
1/30/2008	1/30/2013	7/30/2010	2.6700	107.0081	107.0081	106.4436	103.9356	101.8849	100.5442	99.9735	99.8688
2/7/2008	2/7/2013	8/9/2010	2.4900	106.5909	106.5909	105.9997	103.5141	101.5493	100.3472	99.9264	99.8048
2/13/2008	2/13/2013	2/14/2011	2.9200	107.7779	107.7779	107.1604	104.5911	102.4223	100.8586	99.8368	99.0888
2/14/2008	2/14/2018	2/14/2012	3.1900	123.5222	115.6735	109.3658	105.3785	102.7558	100.7946	99.0974	97.5206
2/19/2008	2/19/2013	8/19/2010	2.5900	106.9420	106.9420	106.2990	103.6250	101.0223	98.4988	96.0517	93.6781
2/22/2008	2/22/2011	2/23/2009	2.5000	101.6457	101.6457	101.6457	101.2997	100.6440	99.9969	99.3581	98.7274
2/25/2008	2/25/2013	2/25/2011	3.0900	108.3337	108.3337	107.6671	104.9617	102.4913	100.8182	99.8317	99.1114
2/25/2008	2/26/2018	8/25/2010	2.4200	117.8410	112.7290	108.2293	104.5723	102.0006	100.4767	99.9026	99.7156
3/7/2008	3/9/2015	3/7/2011	2.8900	113.7503	113.2158	109.2437	105.7171	103.0026	101.1193	99.8961	99.0213
3/7/2008	3/7/2018	3/7/2013	3.5500	126.5541	120.3150	114.6196	109.7839	105.7716	102.3466	99.3121	96.5500
3/10/2008	3/11/2013	9/10/2010	2.3900	106.5386	106.5386	105.8355	103.3183	101.3816	100.2624	99.8405	99.6274
3/11/2008	3/11/2011	9/13/2010	2.0900	101.4744	101.4744	101.4744	101.0876	100.4045	99.9767	99.7548	99.5490
3/12/2008	3/12/2013	9/13/2010	2.0100	105.5045	105.5045	104.8104	102.4067	100.7396	99.9985	99.7388	99.5324
3/14/2008	3/14/2018	9/14/2010	2.4000	117.7401	112.6445	108.1519	104.5165	101.9666	100.4755	99.8659	99.6095
3/17/2008	3/18/2013	3/17/2011	2.6900	107.4117	107.4117	106.6772	104.0811	101.9748	100.5149	99.5253	98.7552
3/17/2008	3/17/2015	3/17/2011	2.6200	112.5238	111.8897	107.1085	103.0896	101.0915	100.1082	99.3703	98.6765
3/17/2008	3/19/2018	3/18/2013	3.3000	124.6840	118.6233	113.1344	108.4991	104.6512	101.3428	98.3895	95.6805
3/25/2008	3/27/2023	3/25/2013	3.1500	126.7667	116.0036	110.5236	106.1715	102.8611	99.9891	97.3492	94.8480
3/26/2008	3/26/2018	3/26/2012	2.9800	121.9709	114.0681	108.3100	104.7333	102.2748	100.3212	98.5771	96.9229
3/28/2008	3/28/2013	3/28/2011	2.8200	107.8483	107.8483	107.0657	104.2890	101.9065	100.4390	99.5313	98.7711
3/28/2008	3/28/2013	3/28/2011	2.8000	107.7926	107.7926	107.0101	104.2348	101.8672	100.4138	99.5137	98.7556
3/28/2008	3/28/2018	9/28/2010	2.0200	114.8814	110.2903	106.2854	103.0853	101.0086	100.0369	99.6896	99.4400
3/28/2008	3/28/2018	3/28/2011	2.7700	120.6326	115.0736	110.1171	106.0786	103.0904	101.0709	99.7673	98.8302
3/31/2008	3/31/2011	9/30/2010	1.9900	101.5144	101.5144	101.5144	101.0790	100.3569	99.9303	99.6714	99.4199
4/14/2008	4/14/2015	4/14/2011	2.7500	113.3591	112.5542	107.6884	103.5612	101.3619	100.2369	99.3902	98.6191
4/28/2008	4/28/2015	4/28/2011	3.2500	115.9147	115.1090	110.8862	107.1079	104.1030	101.8837	100.3192	99.1762
4/28/2008	4/30/2018	7/28/2010	2.1500	115.9063	111.0893	106.9136	103.5494	101.3019	100.1523	99.9147	99.8372
4/30/2008	4/30/2018	4/30/2013	3.7400	128.0691	120.1153	114.2286	109.3231	105.3908	102.0465	99.0791	96.3468
5/2/2008	5/4/2015	5/2/2011	3.9900	119.6051	118.7353	114.2404	110.1118	106.6181	103.5959	100.8585	98.5527
5/5/2008	5/5/2015	5/5/2011	3.1700	115.5845	114.7449	110.5609	106.8276	103.8839	101.7308	100.2030	99.0736
5/8/2008	5/8/2015	8/9/2010	2.9600	114.5767	113.7327	109.6497	106.0354	103.2407	101.3112	100.2349	99.8682
5/19/2008	5/19/2015	5/21/2012	4.7000	123.2897	122.2652	117.1995	112.4571	108.3559	104.3931	100.2519	96.3924
5/19/2008	5/21/2018	5/20/2013	3.8900	129.3503	121.3112	115.2408	110.1353	106.0669	102.5970	99.5206	96.6977
5/23/2008	5/23/2013	5/23/2011	4.0400	111.8723	111.8723	110.8767	107.9521	105.2473	102.7184	100.2762	98.1806
5/23/2008	5/23/2018	5/23/2011	3.2700	124.7012	118.5636	113.0509	108.4794	104.9579	102.3832	100.5663	99.2365
5/27/2008	5/27/2011	8/27/2010	3.2200	102.9604	102.9604	102.9604	102.3719	101.4567	100.5578	99.6749	98.8074
5/27/2008	5/28/2013	5/27/2011	3.4900	110.3044	110.3044	109.2888	106.3142	103.5961	101.5743	100.1971	99.1442
5/29/2008	5/29/2018	5/31/2011	3.4600	125.9365	117.7129	109.9830	104.7955	102.2938	100.9000	99.9134	99.0142
6/6/2008	6/6/2013	6/6/2011	3.9900	111.8806	111.8806	110.8283	107.8038	104.9372	102.4462	100.3959	98.6225
6/10/2008	6/11/2012	9/10/2010	3.9400	107.7919	107.7919	107.7851	105.8100	103.7219	101.3373	98.7370	96.2420
6/16/2008	6/17/2013	6/16/2011	4.0700	112.2431	112.2431	111.1485	108.0909	105.2181	102.8409	101.1256	99.8192
6/24/2008	6/24/2015	6/24/2011	3.8300	119.3614	118.2294	113.6780	109.5511	106.1479	103.4716	101.4371	99.8945
6/30/2008	7/1/2013	9/30/2010	2.9200	108.8971	108.8971	107.7750	104.9292	102.5889	100.9469	100.0601	99.6724
6/30/2008	7/1/2013	9/30/2010	3.4500	110.5121	110.5121	109.3772	106.4349	103.8871	101.9078	100.5970	99.9124
6/30/2008	6/30/2015	9/30/2010	3.3700	117.0920	115.9669	111.5857	107.6897	104.5666	102.2434	100.7248	99.9390
6/30/2008	7/2/2018	6/30/2011	3.6900	127.9079	119.5445	111.6222	106.0581	102.9878	101.3217	100.1493	99.1456
7/1/2008	7/1/2015	7/1/2011	4.6000	123.3436	122.0538	116.8296	111.7223	107.2989	103.7799	100.9294	98.2600
7/7/2008	7/8/2013	7/7/2011	4.5900	114.0752	114.0752	112.8861	109.7422	106.6923	103.8271	101.2134	98.6033
7/8/2008	7/8/2013	7/8/2011	4.2500	113.0325	113.0325	111.8454	108.7184	105.7310	103.0927	100.8285	98.7039
7/10/2008	7/10/2014	7/10/2012	4.8000	119.6122	119.6029	116.1806	112.1148	108.4593	104.9518	101.3144	97.4674
7/11/2008	7/11/2018	7/11/2012	3.7500	128.4279	120.0741	113.3313	108.3809	104.9181	102.2088	99.9350	97.8922
7/14/2008	7/14/2015	7/15/2013	4.9000	125.0430	123.6625	118.6252	113.7971	109.1993	104.5133	99.6319	94.5240
7/14/2008	7/16/2018	7/14/2010	2.5000	118.8156	113.4504	108.7638	104.9750	102.2830	100.6399	99.9961	99.9320
7/14/2008	7/16/2018	7/14/2011	3.2500	124.7731	118.5751	113.0300	108.4504	104.9266	102.3374	100.4507	99.0146
7/17/2008	7/17/2018	7/17/2013	3.7500	128.4501	120.4024	114.5723	109.5847	105.4833	101.9649	98.8152	95.9042
7/21/2008	7/22/2013	7/21/2010	3.0000	109.3159	109.3159	108.0635	104.9503	101.9330	100.0436	99.9854	99.9272
8/15/2008	8/15/2018	8/15/2011	3.8300	129.5611	122.8068	116.6829	111.5328	107.4408	104.2839	101.8835	100.0362
8/19/2008	8/19/2013	8/19/2010	3.4400	110.9498	110.9498	109.5488	106.3382	103.2271	100.7006	100.0456	99.8870
9/8/2008	9/9/2013	9/8/2010	2.8900	109.3676	109.3676	107.9136	104.9691	102.5950	100.9548	100.0894	99.7519
5/13/2009	5/13/2014	5/13/2013	4.0000	115.6990	115.6990	112.7815	108.8470	104.6386	99.7693	94.6425	90.1379
9/28/2009	9/30/2013	9/28/2012	2.9200	109.6351	109.6351	108.0814	104.5595	100.3630	96.4809	93.2847	90.6663
5/11/2010	5/11/2015	5/11/2015	3.7000	118.2520	117.2772	111.6973	105.8373	99.8169	93.5076	87.0083	80.8850
5/24/2010	5/26/2015	5/24/2011	2.2500	111.1925	110.1331	105.1764	100.3675	95.8027	95.1345	94.4124	92.2905
6/15/2010	6/15/2015	6/15/2011	2.2800	111.4684	110.2872	105.2734	100.4126	95.8010	95.7394	95.0878	94.6047