

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	110.5276	110.5276	110.5276	109.3955	107.7687	106.1774	104.6386	103.2049
4/8/1998	4/8/2013	10/8/2010	5.4900	114.9748	114.9748	114.8379	112.1366	109.4045	106.8674	104.6152	102.7375
8/19/1998	8/19/2013	8/19/2010	5.4900	117.0029	117.0029	116.5554	113.3565	110.2881	107.4849	105.0290	102.9967
8/19/1998	8/19/2013	8/19/2010	5.4900	117.0029	117.0029	116.5554	113.3565	110.2881	107.4849	105.0290	102.9967
8/25/1998	8/19/2013	10/25/2010	5.4900	117.0029	117.0029	116.5555	113.3567	110.2893	107.4843	105.0269	102.9895
8/27/1998	8/19/2013	10/27/2010	5.4900	117.0029	117.0029	116.5555	113.3568	110.2889	107.4833	105.0245	102.9852
9/30/1998	9/30/2013	9/30/2010	5.2200	116.7756	116.7756	116.1626	112.8594	109.7259	106.8996	104.4663	102.4938
12/14/1998	12/16/2013	9/14/2010	5.3900	118.4748	118.4748	117.5551	114.0216	110.6878	107.6942	105.1178	103.0136
12/14/1998	12/16/2013	9/14/2010	4.8900	116.7609	116.7609	115.8440	112.3493	109.0928	106.2231	103.8226	101.9755
12/15/1998	12/16/2013	9/15/2010	4.8800	116.7266	116.7266	115.8098	112.3158	109.0606	106.1927	103.7963	101.9532
1/7/2000	1/7/2015	10/7/2010	5.9500	126.7903	126.7903	123.8382	119.1929	114.9353	111.1700	107.9284	105.2322
8/8/2000	8/9/2010	8/9/2010	5.9900	100.1497	100.1497	100.1497	100.1432	100.1181	100.0930	100.0680	100.0429
8/18/2000	8/18/2010	8/18/2010	6.0900	100.3045	100.3045	100.3045	100.2914	100.2412	100.1911	100.1410	100.0910
10/5/2000	10/5/2010	10/5/2010	5.7100	101.0468	101.0468	101.0468	100.9984	100.8142	100.6306	100.4477	100.2655
10/10/2000	10/12/2010	10/12/2010	5.8400	101.1842	101.1842	101.1842	101.1299	100.9260	100.7230	100.5208	100.3194
10/13/2000	10/13/2010	10/13/2010	5.7500	101.1819	101.1819	101.1819	101.1268	100.9201	100.7143	100.5094	100.3053
10/23/2000	10/25/2010	10/25/2010	5.6400	101.3473	101.3473	101.3473	101.2821	101.0419	100.8028	100.5649	100.3281
12/5/2000	12/6/2010	9/7/2010	5.4100	101.9235	101.9235	101.9235	101.8075	101.4498	101.0946	100.7419	100.3932
12/11/2000	12/13/2010	9/13/2010	5.1700	101.9387	101.9387	101.9387	101.8115	101.4343	101.0600	100.6885	100.3232
12/12/2000	12/13/2010	9/13/2010	5.1100	101.9162	101.9162	101.9162	101.7890	101.4119	101.0376	100.6662	100.3012
12/15/2000	12/15/2010	9/15/2010	5.1200	101.9483	101.9483	101.9483	101.8179	101.4353	101.0555	100.6786	100.3084
12/20/2000	12/20/2010	9/20/2010	4.9500	101.9524	101.9524	101.9524	101.8140	101.4175	101.0241	100.6337	100.2586
12/21/2000	12/21/2010	9/21/2010	4.8600	101.9304	101.9304	101.9304	101.7904	101.3912	100.9951	100.6021	100.2310
1/11/2001	1/11/2011	10/11/2010	5.3700	102.4462	102.4462	102.4462	102.2683	101.8098	101.3555	100.9052	100.4589
1/12/2001	1/12/2011	10/12/2010	5.3000	102.4291	102.4291	102.4291	102.2492	101.7880	101.3310	100.8781	100.4293
2/5/2001	2/7/2011	8/5/2010	4.8200	102.5571	102.5571	102.5571	102.3252	101.7921	101.2644	100.7466	100.2879
2/7/2001	2/7/2011	8/9/2010	4.8200	102.5571	102.5571	102.5571	102.3252	101.7921	101.2644	100.7466	100.2863
2/26/2001	2/28/2011	8/26/2010	5.0600	102.9796	102.9796	102.9796	102.7019	102.1097	101.5244	100.9485	100.4224
2/26/2001	2/28/2011	8/26/2010	5.4500	103.2093	103.2093	103.2093	102.9313	102.3384	101.7522	101.1744	100.6235
2/26/2001	2/28/2011	8/26/2010	4.7900	102.8206	102.8206	102.8206	102.5431	101.9515	101.3667	100.7958	100.2882
2/27/2001	2/28/2011	8/27/2010	5.0200	102.9561	102.9561	102.9561	102.6784	102.0863	101.5010	100.9253	100.4015
2/27/2001	2/28/2011	8/27/2010	4.7600	102.8030	102.8030	102.8030	102.5255	101.9339	101.3492	100.7790	100.2716
3/1/2001	3/1/2011	9/1/2010	5.2700	103.1179	103.1179	103.1179	102.8380	102.2425	101.6541	101.0764	100.5379
3/14/2001	3/14/2011	9/14/2010	4.8600	103.0508	103.0508	103.0508	102.7435	102.1126	101.4896	100.8838	100.3468
4/23/2001	4/25/2011	4/24/2006	5.3500	103.9826	103.9826	103.9826	103.5842	102.8346	102.0959	101.3679	100.6504
6/1/2001	6/1/2011	9/1/2010	4.9900	104.2274	104.2274	104.2274	103.7497	102.8979	102.0614	101.2590	100.5689
12/13/2001	12/13/2011	9/13/2010	4.9200	106.8330	106.8330	106.8330	105.9115	104.5190	103.1632	101.9085	100.8707
6/3/2002	6/4/2012	9/3/2010	4.4900	108.4058	108.4058	108.4058	106.9862	105.1121	103.2808	101.4911	99.7417
6/4/2002	6/4/2012	9/4/2010	4.4900	108.4058	108.4058	108.4058	106.9862	105.1121	103.2808	101.4911	99.7417
12/5/2002	12/5/2012	9/7/2010	3.7900	109.0322	109.0322	109.0322	106.8836	104.5140	102.2098	99.9688	97.7890
3/6/2003	3/6/2013	9/7/2010	2.9900	107.8813	107.8813	107.8121	105.3348	102.9844	101.1955	100.1740	99.8738
2/5/2004	12/14/2010	9/14/2010	5.8200	102.1986	102.1986	102.1986	102.0696	101.6891	101.3115	100.9366	100.5646
6/18/2004	6/20/2011	9/18/2010	4.1200	103.7078	103.7078	103.7078	103.1902	102.2892	101.4040	100.5341	99.6792
7/2/2004	7/2/2014	10/4/2010	3.9900	115.8703	115.8703	114.0204	109.9504	106.0207	102.2561	98.6489	96.2947
12/13/2004	12/15/2014	9/13/2010	3.3200	114.7359	114.7359	112.0993	108.1372	104.8685	102.3863	100.7545	100.0074
9/1/2005	9/1/2015	9/1/2010	4.1300	121.3140	121.2521	116.6226	111.3387	106.3047	101.5348	97.0138	95.3194
9/19/2005	9/19/2012	9/20/2010	3.8200	108.2867	108.2867	108.2867	106.4789	104.3566	102.4611	101.0036	100.1383
9/26/2005	9/26/2012	9/27/2010	3.8900	108.5142	108.5142	108.5142	106.6745	104.5301	102.6051	101.1059	100.1787
9/30/2005	9/30/2015	9/30/2010	4.4400	123.2716	123.1534	118.3025	112.9009	107.7563	102.8846	98.2699	96.3110
10/26/2005	10/26/2015	10/26/2010	4.5400	124.1236	123.9548	118.9131	113.4268	108.2048	103.2629	98.5845	96.0410
10/28/2005	10/28/2015	10/28/2010	4.3100	122.9253	122.7531	118.0578	113.2397	109.1290	105.7705	103.1684	101.3086
10/28/2005	10/28/2015	10/28/2010	4.1400	122.0210	121.8489	117.1953	112.4432	108.4240	105.1735	102.6863	100.9842
11/4/2005	11/4/2010	8/4/2010	4.5200	101.2053	101.2053	101.2053	101.1304	100.8627	100.5964	100.3316	100.0726
11/21/2005	11/21/2012	8/23/2010	4.2900	110.0571	110.0571	110.0571	107.9626	105.6549	103.5584	101.8227	100.6156
1/6/2006	1/6/2016	10/6/2010	4.0200	122.1643	121.8559	116.8583	112.0742	108.0671	104.8685	102.4609	100.8817
1/17/2006	1/19/2016	10/18/2010	4.0800	122.6425	122.3086	117.2182	112.3860	108.3287	105.0747	102.6049	100.9457
3/20/2006	3/21/2011	9/21/2010	4.7600	103.0806	103.0806	103.0806	102.7584	102.1082	101.4663	100.8325	100.2066
4/11/2006	4/11/2011	10/12/2010	4.9800	103.5135	103.5135	103.5135	103.1459	102.4366	101.7374	101.0583	100.4602
4/19/2006	4/19/2013	10/19/2010	4.6300	112.7704	112.7704	112.6111	109.8981	107.2064	104.7825	102.7514	101.2175
4/24/2006	4/25/2016	10/25/2010	4.4400	125.8367	124.9067	119.4894	114.3786	110.0384	106.4850	103.7085	101.6961
4/28/2006	4/28/2011	10/28/2010	5.0900	103.8314	103.8314	103.8314	103.4268	102.6697	101.9237	101.1886	100.4641
5/5/2006	5/6/2013	8/5/2010	4.7800	113.4098	113.4098	113.2157	110.4335	107.6906	105.2135	103.1185	101.5149
5/5/2006	5/5/2016	8/5/2010	4.9800	129.1175	128.1027	122.5113	117.1682	112.5415	108.6686	105.5282	103.0946
5/5/2006	5/5/2016	8/5/2010	4.3500	125.4338	124.4444	119.0449	113.9723	109.6798	106.1880	103.4870	101.5549
5/5/2006	5/5/2016	8/5/2010	4.5300	126.4863	125.4894	120.0300	114.8723	110.4834	106.8761	104.0413	101.9687
5/9/2006	5/9/2011	8/9/2010	5.0500	103.9556	103.9556	103.9556	103.5274	102.7396	101.9645	101.2147	100.5544
5/15/2006	5/16/2016	8/16/2010	4.3500	125.5667	124.4940	119.0772	113.9883	109.6823	106.1805	103.4699	101.5270
5/15/2006	5/16/2016	8/16/2010	4.5200	126.5659	125.4859	120.0119	114.8413	110.4428	106.8311	103.9932	101.9191
5/19/2006	5/19/2016	8/19/2010	4.5100	126.5447	125.4428	119.9672	114.7964	110.3988	106.7881	103.9534	101.8812
6/12/2006	6/13/2016	9/13/2010	4.6200	127.5130	126.2286	120.6794	115.4296	110.9530	107.2633	104.3409	102.1817
6/26/2006	6/27/2016	9/27/2010	4.7300	128.3520	126.9666	121.3484	116.0273	111.4693	107.6981	104.6798	102.4187

Start Date	Maturity		Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Date	Next Call Date									
6/28/2006	6/28/2013	9/28/2010	4.9500	114.6155	114.6155	114.3120	111.3193	108.4282	105.8138	103.5834	101.8363
6/30/2006	7/1/2013	9/30/2010	4.8900	114.4790	114.4790	114.1694	111.1690	108.2798	105.6757	103.4623	101.7359
7/14/2006	7/15/2013	10/14/2010	4.8900	114.6692	114.6692	114.3306	111.2769	108.3542	105.7270	103.5050	101.7812
7/19/2006	7/19/2011	10/19/2010	5.2500	105.1477	105.1477	105.1477	104.5637	103.5766	102.6092	101.6809	100.8536
7/20/2006	7/20/2011	10/20/2010	5.3000	105.2114	105.2114	105.2114	104.6251	103.6349	102.6636	101.7106	100.7754
7/24/2006	7/25/2016	10/25/2010	4.6600	128.2948	126.7404	121.0783	115.7516	111.2098	107.4629	104.4858	102.2708
7/28/2006	7/28/2016	10/28/2010	4.4900	127.3000	125.7414	120.1302	114.8775	110.4307	106.7863	103.9303	101.8452
8/1/2006	8/1/2016	11/1/2010	4.8900	129.7865	128.1740	122.4278	117.0016	112.3343	108.4539	105.3244	102.9305
8/11/2006	8/11/2011	8/11/2010	4.7900	105.0026	105.0026	105.0026	104.3680	103.3195	102.2958	101.3339	100.5490
8/21/2006	8/21/2013	8/22/2010	4.7500	114.7374	114.7374	114.2829	111.0936	107.9716	104.9560	102.0425	99.7878
8/25/2006	8/25/2016	8/25/2010	4.3500	126.7870	125.0201	119.4303	114.2231	109.8340	106.2709	103.5147	101.5350
8/28/2006	8/29/2011	9/1/2010	4.8900	105.3516	105.3516	105.3516	104.6753	103.5766	102.4991	101.4423	100.4054
9/22/2006	9/22/2011	9/22/2010	4.7900	105.5614	105.5614	105.5614	104.8303	103.6660	102.5300	101.4682	100.6029
9/29/2006	9/29/2011	9/29/2010	4.5900	105.4184	105.4184	105.4184	104.6720	103.4899	102.3388	101.2796	100.4543
10/10/2006	10/10/2013	10/12/2010	4.2500	113.7762	113.7762	113.1267	109.8674	106.8621	104.2835	102.2340	100.8205
10/12/2006	10/15/2013	10/12/2010	4.5000	114.6491	114.6491	113.9791	110.6848	107.6265	104.9581	102.7917	101.1977
10/30/2006	10/31/2011	10/30/2010	4.8500	106.1565	106.1565	106.1565	105.3351	104.0625	102.8142	101.5896	100.3880
11/3/2006	11/3/2011	8/8/2010	4.6900	105.9924	105.9924	105.9924	105.1649	103.8853	102.6301	101.3989	100.1908
11/6/2006	11/6/2013	8/6/2010	4.2900	114.2276	114.2276	113.4728	110.1410	107.0777	104.4528	102.3630	100.8986
11/10/2006	11/13/2012	8/10/2010	4.3900	110.1939	110.1939	110.1939	108.1330	105.8402	103.7454	101.9982	100.7464
11/17/2006	11/18/2013	8/17/2010	4.3500	114.5716	114.5716	113.7689	110.3981	107.2963	104.6290	102.4935	100.9670
11/24/2006	11/25/2016	8/24/2010	4.1900	126.8724	124.4609	118.8006	113.5886	109.2380	105.7475	103.0836	101.2185
11/30/2006	12/2/2013	9/1/2010	4.3500	114.7408	114.7408	113.8793	110.4035	107.0188	103.7583	100.6168	98.8865
12/1/2006	12/1/2016	9/1/2010	4.0900	126.2992	123.8634	118.2550	113.1029	108.8269	105.4227	102.8515	101.1039
12/4/2006	12/5/2016	9/7/2010	4.0800	126.2802	123.8158	118.2062	113.0554	108.7838	105.3833	102.8156	101.0752
12/5/2006	12/5/2016	9/7/2010	4.2600	127.4397	124.9426	119.2468	113.9927	109.6001	106.0626	103.3552	101.4373
12/6/2006	12/6/2013	9/7/2010	4.4000	114.9591	114.9591	114.0850	110.6636	107.5212	104.8173	102.6512	101.0868
12/8/2006	12/8/2016	9/8/2010	3.9900	125.7337	123.2625	117.6924	112.5918	108.3775	105.0424	102.5505	100.9085
12/12/2006	12/12/2016	9/13/2010	3.9900	125.7780	123.2766	117.7000	112.5948	108.3771	105.0387	102.5419	100.8941
12/12/2006	12/12/2016	9/13/2010	4.0500	126.1657	123.6527	118.0458	112.9044	108.6455	105.2599	102.7117	100.9996
12/19/2006	12/19/2011	9/20/2010	4.4900	106.3106	106.3106	106.3106	105.3777	103.9731	102.6152	101.3968	100.4834
12/19/2006	12/19/2016	9/20/2010	4.1900	127.1517	124.5622	118.8738	113.6386	109.2785	105.7802	103.1127	101.2428
12/20/2006	12/20/2013	9/20/2010	4.5000	115.4741	115.4741	114.5437	111.0738	107.8795	105.1159	102.8815	101.2337
12/21/2006	12/21/2011	9/21/2010	4.5300	106.3920	106.3920	106.3920	105.4542	104.0436	102.6790	101.4485	100.5166
12/27/2006	12/27/2013	9/27/2010	4.5000	115.5616	115.5616	114.6035	111.1140	107.9049	105.1276	102.8809	101.2223
12/28/2006	12/28/2016	9/28/2010	4.2500	127.6468	124.9806	119.2455	113.9626	109.5529	106.0008	103.2774	101.3471
12/28/2006	12/28/2016	9/28/2010	4.4000	128.6226	125.9289	120.1225	114.7574	110.2498	106.5893	103.7477	101.6939
1/8/2007	1/9/2012	7/8/2010	4.7500	106.9531	106.9531	106.9531	105.9699	104.5040	103.0666	101.6570	100.2744
1/12/2007	1/12/2017	10/12/2010	4.4200	128.9369	126.1406	120.3027	114.9158	110.3923	106.7177	103.8638	101.8040
1/16/2007	1/17/2017	1/17/2012	4.7900	131.4258	128.5288	122.5197	116.9322	112.1709	108.2328	105.0254	102.4126
1/23/2007	1/23/2014	10/25/2010	4.4900	115.8637	115.8637	114.7993	111.2406	107.9847	105.1745	102.9079	101.2393
1/23/2007	1/23/2017	10/25/2010	4.4600	129.3350	126.4564	120.5716	115.1460	110.5851	106.8710	103.9736	101.8660
1/29/2007	1/29/2014	10/29/2010	4.7900	117.0035	117.0035	115.9089	112.2393	108.6696	105.2358	101.9319	99.9510
2/2/2007	2/2/2017	8/2/2010	4.6900	130.9782	127.5307	120.6531	113.9057	107.5696	103.6372	101.1449	99.7019
2/9/2007	2/9/2012	8/9/2010	4.7500	107.3621	107.3621	107.3621	106.2999	104.7483	103.2474	101.8868	100.8051
2/9/2007	2/9/2017	8/9/2010	4.4700	129.6119	126.6039	120.6957	115.2517	110.6783	106.9550	104.0520	101.9452
2/12/2007	2/13/2012	8/12/2010	4.8800	107.6178	107.6178	107.6178	106.5423	104.9778	103.4612	102.0754	100.9475
2/15/2007	2/15/2012	8/16/2010	4.9900	107.8173	107.8173	107.8173	106.7348	105.1627	103.6221	102.1121	100.6319
2/20/2007	2/21/2017	8/20/2010	4.3900	129.2282	126.1312	120.2470	114.8326	110.2989	106.6219	103.7702	101.7150
2/20/2007	2/21/2017	2/21/2012	4.8500	132.2910	128.6513	121.7061	115.2068	109.9699	106.0419	103.2580	101.0862
2/23/2007	2/23/2017	8/23/2010	4.2500	128.3196	125.2370	119.4165	114.0831	109.6364	106.0608	103.3222	101.3818
2/23/2007	2/23/2017	8/23/2010	4.3500	128.9860	125.8813	120.0118	114.6179	110.1059	106.4562	103.6362	101.6120
3/2/2007	3/2/2012	9/2/2010	4.4900	107.2335	107.2335	107.2335	106.1054	104.4965	102.9559	101.5986	100.5947
3/9/2007	3/10/2014	9/9/2010	4.4500	116.2910	116.2910	115.0110	111.3458	108.0170	105.1730	102.8991	101.2413
3/16/2007	3/16/2017	9/16/2010	4.0900	127.4920	124.2841	118.5271	113.2763	108.9324	105.4752	102.8639	101.0830
3/20/2007	3/20/2012	9/20/2010	4.5500	107.5576	107.5576	107.5576	106.3734	104.7115	103.0845	101.4912	99.9308
3/21/2007	3/21/2017	9/21/2010	4.2200	128.4245	125.1437	119.3091	113.9716	109.5320	105.9696	103.2486	101.3311
3/23/2007	3/23/2017	9/23/2010	4.2900	128.9198	125.6055	119.7310	114.3500	109.8595	106.2414	103.4623	101.4823
3/23/2007	3/23/2017	9/23/2010	4.2900	128.9198	125.6055	119.7310	114.3500	109.8595	106.2414	103.4623	101.4823
3/30/2007	3/30/2012	9/21/2010	4.6700	107.8867	107.8867	107.8867	106.6704	104.9788	103.3231	101.7021	100.1149
4/2/2007	4/2/2012	10/4/2010	4.5900	107.7898	107.7898	107.7898	106.5650	104.8686	103.2466	101.8136	100.7278
4/9/2007	4/10/2017	10/12/2010	4.1500	128.1835	124.7824	118.9571	113.6491	109.2520	105.7403	103.0774	101.2275
4/12/2007	4/12/2017	10/12/2010	4.2500	128.8863	125.4426	119.5593	114.1859	109.7173	106.1257	103.3792	101.4400
4/13/2007	4/13/2017	10/13/2010	4.4500	130.2581	126.7536	120.7652	115.2737	110.6681	106.9274	104.0185	101.9077
4/23/2007	4/23/2012	10/25/2010	4.6500	108.1629	108.1629	108.1629	106.8722	105.1135	103.3930	101.7097	100.0626
4/23/2007	4/23/2014	10/25/2010	4.6200	117.4780	117.4780	115.9821	112.1851	108.7364	105.7697	103.3622	101.5659
4/27/2007	4/27/2012	10/27/2010	4.5500	108.0379	108.0379	108.0379	106.7358	104.9705	103.2874	101.8021	100.6824
4/27/2007	4/27/2017	10/27/2010	4.2500	129.0633	125.5142	119.5948	114.2019	109.7171	106.1111	103.3507	101.3931
5/2/2007	5/2/2014	11/2/2010	4.5900	117.4792	117.4792	115.9413	112.1296	108.6801	105.7235	103.3368	101.5721
5/4/2007	5/5/2014	8/4/2010	4.5500	117.3648	117.3648	115.8130	111.9992	108.5540	105.6062	103.2361	101.4899
5/14/2007	5/16/2011	8/16/2010	4.5000	103.6123	103.6123	103.6123	103.1698	102.3644	101.5736	100.8337	100.2358

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
5/18/2007	5/18/2017	8/18/2010	4.1900	128.8974	125.1956	119.2923	113.9237	109.4690	105.9045	103.1927	101.2920
5/22/2007	5/22/2012	8/23/2010	4.6900	108.6109	108.6109	108.6109	107.2296	105.3919	103.6383	102.0859	100.8684
5/22/2007	5/22/2012	8/23/2010	4.6900	108.6109	108.6109	108.6109	107.2296	105.3919	103.6383	102.0859	100.8684
5/22/2007	5/22/2012	8/23/2010	4.7100	108.6476	108.6476	108.6476	107.2661	105.4280	103.6731	102.1172	100.8927
5/22/2007	5/22/2017	5/22/2012	4.7500	132.8126	128.9174	122.7246	117.0171	112.1816	108.1771	104.8689	102.1065
5/25/2007	5/25/2012	8/25/2010	4.6500	108.5762	108.5762	108.5762	107.1860	105.3407	103.5817	102.0291	100.8215
5/29/2007	5/30/2017	8/30/2010	4.2500	129.4529	125.6304	119.6804	114.2610	109.7539	106.1341	103.3618	101.3933
6/1/2007	6/1/2012	6/2/2008	5.2300	109.7477	109.7477	109.7477	108.3292	106.4530	104.6518	103.0094	101.6491
6/1/2007	6/2/2014	9/1/2010	4.5000	117.5240	117.5240	115.8367	111.9633	108.4807	105.5199	103.1561	101.4257
6/7/2007	6/7/2012	9/7/2010	4.9400	109.2895	109.2895	109.2895	107.8554	105.9680	104.1631	102.5454	101.2413
6/7/2007	6/7/2017	9/7/2010	4.8200	133.5104	129.4681	123.2282	117.4691	112.5857	108.5641	105.3451	102.9057
6/8/2007	6/8/2012	6/9/2008	5.3000	109.9812	109.9812	109.9812	108.5398	106.6423	104.8184	103.1501	101.7503
6/8/2007	6/9/2014	9/8/2010	4.7300	118.5116	118.5116	116.7841	112.8581	109.3002	106.2386	103.7448	101.8675
6/8/2007	6/8/2017	9/8/2010	4.4900	131.2285	127.2666	121.1878	115.6178	110.9501	107.1546	104.1984	102.0443
6/11/2007	6/12/2017	9/13/2010	4.4900	131.2783	127.2834	121.1977	115.6231	110.9517	107.1532	104.1932	102.0340
6/15/2007	6/16/2014	6/16/2008	5.5500	121.8289	121.8289	120.0515	116.0057	112.2568	108.9329	106.0891	103.7707
6/18/2007	6/19/2017	9/20/2010	4.5000	131.4355	127.3793	121.2755	115.6857	110.9993	107.1871	104.2125	102.0379
6/18/2007	6/19/2017	9/20/2010	4.8400	133.8108	129.6607	123.3886	117.6008	112.6914	108.6431	105.3987	102.9284
6/19/2007	6/19/2017	9/20/2010	4.6500	132.4834	128.3841	122.2026	116.5255	111.7363	107.8202	104.7190	102.4198
6/20/2007	6/20/2012	9/20/2010	4.8900	109.3720	109.3720	109.3720	107.8977	105.9747	104.1385	102.4965	101.1776
6/20/2007	6/20/2012	9/20/2010	4.9600	109.5062	109.5062	109.5062	108.0311	106.1064	104.2660	102.6120	101.2735
6/22/2007	6/22/2017	9/22/2010	4.5000	131.4730	127.3926	121.2819	115.6875	110.9965	107.1813	104.2040	102.0273
6/26/2007	6/26/2012	9/27/2010	5.1300	109.9175	109.9175	109.9175	108.4215	106.4759	104.6096	102.9108	101.5116
6/28/2007	6/28/2017	9/28/2010	4.5000	131.5480	127.4200	121.2957	115.6937	110.9959	107.1759	104.1932	102.0101
7/13/2007	7/13/2012	10/13/2010	4.6900	109.2883	109.2883	109.2883	107.7444	105.7625	103.8853	102.2435	100.9664
7/13/2007	7/13/2017	10/13/2010	4.2900	130.2544	126.0915	120.0581	114.5776	110.0250	106.3626	103.5522	101.5582
7/13/2007	7/13/2017	7/13/2011	4.9000	134.5566	130.2056	123.8630	118.0156	113.0509	108.9481	105.6448	103.0588
7/18/2007	7/18/2017	10/18/2010	4.7800	133.7766	129.4220	123.1220	117.3379	112.4422	108.4180	105.2068	102.7832
7/19/2007	7/19/2012	10/19/2010	4.8900	109.7659	109.7659	109.7659	108.2006	106.1964	104.2896	102.5918	101.2353
7/20/2007	7/20/2017	10/20/2010	4.2900	130.3378	126.1232	120.0746	114.5841	110.0247	106.3554	103.5379	101.5364
7/23/2007	7/23/2012	10/25/2010	5.0500	110.1416	110.1416	110.1416	108.5616	106.5424	104.6181	102.8864	101.4907
7/24/2007	7/24/2012	10/25/2010	4.8200	109.6930	109.6930	109.6930	108.1130	106.0966	104.1810	102.4858	101.1385
7/27/2007	7/27/2012	10/27/2010	4.5900	109.2687	109.2687	109.2687	107.6823	105.6640	103.7584	102.1025	100.8385
7/27/2007	7/28/2014	10/27/2010	4.3500	117.6164	117.6164	115.6611	111.6753	108.1344	105.1585	102.8071	101.1209
7/27/2007	7/27/2017	10/27/2010	4.2500	130.1376	125.8883	119.8450	114.3718	109.8317	106.1868	103.3989	101.4218
7/27/2007	7/27/2017	10/27/2010	4.1800	129.6412	125.4186	119.4154	113.9876	109.4970	105.9075	103.1783	101.2651
7/30/2007	1/30/2019	11/1/2010	3.9900	132.9152	126.1177	119.5410	113.8034	109.1599	105.5297	102.8348	101.0522
7/31/2007	7/31/2017	11/1/2010	3.9900	128.3381	124.1687	118.2708	112.9702	108.6143	105.1821	102.6225	100.9481
7/31/2007	7/31/2017	11/1/2010	3.9900	128.3381	124.1687	118.2708	112.9702	108.6143	105.1821	102.6225	100.9481
7/31/2007	7/31/2017	11/1/2010	4.0600	128.8353	124.6389	118.6996	113.3498	108.9408	105.4499	102.8278	101.0684
8/2/2007	8/4/2014	11/2/2010	4.4900	118.2707	118.2707	116.2747	112.2524	108.6669	105.6349	103.2212	101.4594
8/2/2007	8/2/2017	11/2/2010	4.1500	129.4976	125.2530	119.2681	113.8650	109.4016	105.8456	103.1556	101.2864
8/2/2007	8/2/2017	11/2/2010	4.0500	128.7867	124.5811	118.6543	113.3209	108.9299	105.4576	102.8492	101.0882
8/6/2007	8/6/2012	8/6/2010	4.4900	109.1915	109.1915	109.1915	107.5674	105.5257	103.6143	101.9767	100.7680
8/9/2007	8/11/2014	8/9/2011	4.8600	119.8709	119.8709	117.8226	113.7227	110.0148	106.8224	104.1851	102.0683
8/9/2007	8/9/2017	8/9/2010	3.9900	128.4378	124.1924	118.2947	112.9948	108.6440	105.2164	102.6545	100.9630
8/13/2007	8/13/2012	8/13/2010	4.5900	109.4855	109.4855	109.4855	107.8289	105.7650	103.8264	102.1521	100.8768
8/16/2007	8/16/2017	8/16/2010	3.9900	128.5154	124.2080	118.3036	112.9948	108.6386	105.2039	102.6375	100.9406
8/17/2007	8/17/2012	8/17/2010	4.3500	109.0378	109.0378	109.0378	107.3670	105.3007	103.3820	101.7590	100.6119
8/17/2007	8/17/2012	8/17/2010	4.1500	108.6222	108.6222	108.6222	106.9543	104.8962	103.0032	101.4550	100.4005
8/17/2007	8/17/2017	8/17/2010	4.0000	128.5980	124.2778	118.3664	113.0495	108.6840	105.2411	102.6642	100.9548
8/20/2007	8/20/2010	8/20/2010	4.5900	100.2550	100.2550	100.2550	100.2405	100.1848	100.1291	100.0736	100.0181
8/20/2007	8/20/2014	8/20/2010	4.2500	117.4829	117.4829	115.3921	111.3413	107.7525	104.7519	102.3728	100.6236
8/24/2007	8/24/2010	8/24/2010	4.4600	100.2973	100.2973	100.2973	100.2799	100.2131	100.1463	100.0797	100.0132
8/24/2007	8/24/2012	8/24/2010	4.0500	108.4932	108.4932	108.4932	106.7960	104.7239	102.8290	101.3081	100.2874
8/28/2007	8/28/2014	8/30/2010	4.3500	117.9910	117.9910	115.8632	111.8104	108.2189	105.2097	102.8368	101.1306
8/30/2007	8/30/2012	8/30/2010	4.3900	109.2794	109.2794	109.2794	107.5505	105.4483	103.4945	101.8340	100.6421
8/30/2007	9/2/2014	8/30/2010	3.8900	116.1424	116.1424	114.0096	110.0484	106.6192	103.8320	101.7654	100.4380
8/31/2007	8/31/2012	8/31/2010	4.3700	109.2493	109.2493	109.2493	107.5162	105.4122	103.4590	101.8030	100.6209
9/4/2007	9/4/2012	9/7/2010	4.1900	108.9148	108.9148	108.9148	107.1670	105.0622	103.1339	101.5559	100.4863
9/4/2007	9/4/2012	9/7/2010	4.2200	108.9787	108.9787	108.9787	107.2303	105.1241	103.1918	101.6013	100.5153
9/4/2007	9/5/2017	9/7/2010	3.8900	128.0168	123.5976	117.7468	112.4984	108.2153	104.8641	102.3964	100.8092
9/6/2007	9/7/2010	9/7/2010	4.1600	100.4391	100.4391	100.4391	100.4116	100.3058	100.2002	100.0948	99.9897
9/7/2007	9/7/2012	9/7/2010	4.0900	108.7361	108.7361	108.7361	106.9766	104.8688	102.9497	101.4080	100.3914
9/10/2007	9/11/2017	9/10/2010	3.6900	126.6377	122.2649	116.5416	111.4323	107.3067	104.1222	101.8594	100.4919
9/11/2007	9/13/2010	9/13/2010	4.4300	100.5414	100.5414	100.5414	100.5096	100.3870	100.2647	100.1428	100.0211
9/11/2007	9/11/2017	9/13/2010	3.5900	125.9158	121.5928	115.9394	110.9064	106.8632	103.7680	101.6085	100.3436
9/12/2007	9/12/2014	9/13/2010	3.6900	115.4149	115.4149	113.2412	109.3180	105.9650	103.2958	101.3879	100.2667
9/13/2007	9/15/2014	9/13/2010	3.9900	116.7015	116.7015	114.4927	110.4851	107.0042	104.1636	102.0230	100.6412
9/13/2007	9/13/2017	9/13/2010	3.9900	128.8257	124.2980	118.3708	113.0400	108.6716	105.2270	102.6571	100.9542
9/14/2007	9/14/2011	9/14/2010	4.0900	104.6578	104.6578	104.6578	103.9476	102.8104	101.7134	100.7619	100.1317

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
9/14/2007	9/14/2012	9/14/2010	4.3900	109.4623	109.4623	109.4623	107.6670	105.5271	103.5484	101.8792	100.6823
9/17/2007	9/17/2012	9/17/2010	4.2200	109.1310	109.1310	109.1310	107.3253	105.1847	103.2224	101.6079	100.5048
9/27/2007	9/27/2010	9/27/2010	4.2500	100.6847	100.6847	100.6847	100.6428	100.4812	100.3201	100.1596	99.9996
9/27/2007	9/29/2014	9/27/2010	4.4900	118.9691	118.9691	116.6155	112.2518	108.0463	104.0496	100.9575	100.0810
9/27/2007	9/27/2017	9/27/2010	3.6500	126.5112	122.0392	116.3146	111.2207	107.1145	103.9529	101.7197	100.3824
9/28/2007	9/28/2010	9/28/2010	4.2900	100.7030	100.7030	100.7030	100.6604	100.4960	100.3322	100.1689	100.0062
9/28/2007	9/28/2012	9/28/2010	3.8500	108.4480	108.4480	108.4480	106.6003	104.4535	102.5327	101.0472	100.1467
10/3/2007	10/3/2012	10/4/2010	3.8300	108.4573	108.4573	108.4573	106.5883	104.4343	102.5201	101.0592	100.1769
10/9/2007	10/9/2012	10/9/2009	4.4000	109.7894	109.7894	109.7894	107.8825	105.6547	103.4850	101.3716	99.3127
10/11/2007	10/14/2014	10/12/2010	4.1800	117.8335	117.8335	115.4548	111.3441	107.7532	104.7888	102.4976	100.9304
10/11/2007	10/11/2017	10/12/2010	3.9900	129.1360	124.4096	118.4422	113.0906	108.7057	105.2538	102.6755	100.9702
10/15/2007	10/16/2017	10/15/2010	3.9900	129.1914	124.4290	118.4510	113.0947	108.7050	105.2495	102.6658	100.9577
10/22/2007	10/22/2012	10/22/2010	3.9900	109.0212	109.0212	109.0212	107.0657	104.8532	102.8656	101.2977	100.2849
10/25/2007	10/27/2014	10/25/2011	4.3600	118.7589	118.7589	116.2966	112.1137	108.4355	105.3549	102.8600	100.8621
10/26/2007	10/26/2017	10/26/2010	3.3900	124.8956	120.3925	114.8167	109.9098	106.0120	103.0943	101.1133	100.0557
10/29/2007	10/29/2012	10/29/2010	3.9900	109.0988	109.0988	109.0988	107.1125	104.8826	102.8797	101.2989	100.2729
11/2/2007	11/3/2014	11/2/2010	3.9900	117.2445	117.2445	114.7695	110.6722	107.1293	104.2533	102.0877	100.6880
11/2/2007	11/3/2014	11/2/2010	4.1900	118.1089	118.1089	115.6209	111.4711	107.8499	104.8667	102.5619	100.9792
11/5/2007	11/5/2014	8/5/2010	3.9900	117.2667	117.2667	114.7803	110.6781	107.1313	104.2514	102.0810	100.6780
11/5/2007	11/6/2017	11/5/2012	4.3900	132.3741	127.2833	121.0271	115.3770	110.6571	106.7371	103.4312	100.5717
11/6/2007	11/6/2017	8/6/2010	3.4800	125.6629	121.0325	115.3909	110.4095	106.4374	103.4325	101.3741	100.2517
11/9/2007	11/10/2014	11/9/2011	4.3300	118.7982	118.7982	116.2608	112.0596	108.3758	105.3006	102.8062	100.8004
11/13/2007	11/14/2011	8/13/2010	3.7600	104.9190	104.9190	104.9190	104.0706	102.7702	101.5426	100.5553	100.0487
11/13/2007	11/13/2012	8/13/2010	3.6800	108.5452	108.5452	108.5452	106.5001	104.2601	102.3144	100.8671	100.1187
11/13/2007	11/13/2014	8/13/2010	3.3500	114.5713	114.5713	112.1003	108.1796	104.9245	102.4412	100.7848	100.0610
11/19/2007	11/19/2014	8/19/2010	3.7500	116.3738	116.3738	113.8287	109.7605	106.2989	103.5350	101.5409	100.3216
11/19/2007	11/19/2014	8/19/2010	3.7500	116.3738	116.3738	113.8287	109.7605	106.2989	103.5350	101.5409	100.3216
11/19/2007	11/19/2014	11/21/2011	4.2700	118.6445	118.6445	116.0593	111.8508	108.1699	105.1082	102.6303	100.6340
11/19/2007	11/20/2017	11/19/2012	4.2900	131.8035	125.4826	118.2979	112.5319	108.0948	104.6647	101.8188	99.3336
11/20/2007	11/20/2017	11/22/2010	3.7400	127.7259	122.8238	116.9777	111.7770	107.5758	104.3185	101.9813	100.5162
11/23/2007	11/24/2017	11/23/2011	3.9900	129.6236	123.2799	115.7275	109.4589	105.2492	102.6450	100.8269	99.3838
11/23/2007	11/24/2017	11/23/2011	3.9900	129.6236	123.2799	115.7275	109.4589	105.2492	102.6450	100.8269	99.3838
11/29/2007	11/29/2017	8/30/2010	2.9500	121.9427	117.4877	112.2810	107.7426	104.2500	101.7790	100.3325	99.8912
11/30/2007	11/30/2017	8/30/2010	3.1900	123.7369	119.0984	113.6815	108.9264	105.2030	102.4698	100.7264	99.9875
12/6/2007	12/6/2017	9/7/2010	3.2500	124.2375	119.5254	114.0560	109.2517	105.4787	102.7006	100.8895	100.0481
12/7/2007	12/7/2012	9/7/2010	3.4500	108.2410	108.2410	108.2410	106.0974	103.8301	101.9253	100.6061	100.0002
12/10/2007	12/10/2010	9/10/2010	3.8700	101.4189	101.4189	101.4189	101.2969	100.9292	100.5643	100.2051	99.9697
12/10/2007	12/11/2017	12/10/2010	3.4500	125.7771	120.8963	115.2567	110.2795	106.3200	103.3370	101.2963	100.0916
12/11/2007	12/11/2012	9/13/2010	3.7600	109.0234	109.0234	109.0234	106.8531	104.5399	102.5263	101.0155	100.1409
12/14/2007	12/14/2010	9/14/2010	3.6900	101.3939	101.3939	101.3939	101.2655	100.8869	100.5111	100.1539	99.9323
12/14/2007	12/14/2010	9/14/2010	3.6900	101.3939	101.3939	101.3939	101.2655	100.8869	100.5111	100.1539	99.9323
12/20/2007	12/20/2012	9/10/2010	3.7500	109.0931	109.0931	109.0931	106.8788	104.4691	102.1268	99.8497	97.6355
12/20/2007	12/20/2012	9/20/2010	3.6000	108.7294	108.7294	108.7294	106.5242	104.2060	102.2252	100.7788	100.0357
12/24/2007	12/26/2017	12/24/2012	3.9900	129.9783	123.3229	116.3766	110.9983	106.8786	103.6241	100.8798	98.4149
12/26/2007	12/26/2012	9/27/2010	3.4600	108.4475	108.4475	108.4475	106.2203	103.9048	101.9583	100.5984	99.9599
12/26/2007	12/26/2012	12/27/2010	3.9600	109.6684	109.6684	109.6684	107.4266	105.0565	102.9607	101.3255	100.2264
1/2/2008	1/2/2013	10/4/2010	3.4900	108.5886	108.5886	108.5886	106.3307	104.0010	102.0476	100.6790	99.9985
1/3/2008	1/5/2015	1/3/2011	3.6500	116.4137	116.4137	113.6264	109.5110	106.0504	103.3231	101.3903	100.1592
1/4/2008	1/4/2018	1/4/2011	3.3600	125.3286	120.3532	114.7612	109.8462	105.9594	103.0645	101.1044	99.9593
1/7/2008	1/7/2013	10/7/2010	2.9900	107.3996	107.3996	107.3996	105.1392	102.8833	101.1468	100.1546	99.7821
1/7/2008	1/7/2013	1/7/2011	3.5900	108.8846	108.8846	108.8846	106.6014	104.2457	102.2473	100.7882	99.8933
1/7/2008	1/7/2015	1/7/2011	3.4900	115.7135	115.7135	112.9356	108.8724	105.4877	102.8709	101.0536	99.9658
1/7/2008	1/8/2018	10/7/2010	2.5900	119.5525	115.1783	110.3046	106.1074	102.9935	100.9634	100.0253	99.6990
1/8/2008	1/8/2013	10/8/2010	3.1500	107.8044	107.8044	107.8044	105.5326	103.2438	101.4140	100.3001	99.8218
1/8/2008	1/8/2018	10/8/2010	2.5700	119.4015	115.0467	110.1940	106.0165	102.9249	100.9176	100.0084	99.6887
1/8/2008	1/8/2018	10/8/2010	2.6400	119.9299	115.5085	110.5803	106.3328	103.1629	101.0704	100.0575	99.7081
1/10/2008	1/10/2011	10/12/2010	3.1000	101.4035	101.4035	101.4035	101.2285	100.7755	100.3313	99.9915	99.7677
1/11/2008	1/11/2018	10/12/2010	2.7200	120.5566	116.0457	111.0291	106.6993	103.4387	101.2504	100.1115	99.7135
1/14/2008	1/16/2018	1/14/2011	3.2400	124.5319	119.5638	114.0500	109.2309	105.4470	102.6655	100.8382	99.7807
1/16/2008	1/16/2013	10/18/2010	2.6900	106.7244	106.7244	106.7244	104.4415	102.2454	100.6727	99.9528	99.6609
1/16/2008	1/16/2013	10/18/2010	2.5500	106.3744	106.3744	106.3744	104.1011	101.9466	100.4911	99.8814	99.6291
1/16/2008	1/16/2015	10/18/2010	2.6400	111.9521	111.9521	109.2822	105.5978	102.7587	100.8627	99.9867	99.6551
1/16/2008	1/16/2018	10/18/2010	2.3800	118.0198	113.8194	109.1648	105.1849	102.2962	100.5509	99.8569	99.5925
1/17/2008	1/17/2018	10/18/2010	2.2500	117.0417	112.9766	108.4746	104.6380	101.9097	100.3575	99.8026	99.5634
1/18/2008	1/18/2013	10/18/2010	2.5500	106.3885	106.3885	106.3885	104.1068	101.9486	100.4916	99.8814	99.6290
1/18/2008	1/20/2015	10/18/2010	2.3500	110.6652	110.6652	108.0608	104.5551	101.9489	100.4074	99.8257	99.5853
1/18/2008	1/18/2018	10/18/2010	2.2900	117.3511	113.2367	108.6853	104.8033	102.0237	100.4151	99.8150	99.5723
1/24/2008	1/24/2012	10/25/2010	2.4400	103.6732	103.6732	103.6732	102.6708	101.2340	100.2196	99.8137	99.5691
1/24/2008	1/24/2013	10/25/2010	2.5000	106.3049	106.3049	106.3049	104.0025	101.8505	100.4301	99.8434	99.5840
1/25/2008	1/25/2013	1/25/2011	2.6500	106.6906	106.6906	106.6906	104.3421	101.9278	100.3734	99.6628	99.1616
1/25/2008	1/25/2013	1/25/2011	2.2500	105.6806	105.6806	105.6806	103.3414	100.8802	98.4903	96.1695	93.9153

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
1/28/2008	1/28/2013	1/28/2011	2.9900	107.5740	107.5740	107.5740	105.2043	102.7332	100.8196	99.8879	99.3207
1/30/2008	1/30/2013	11/1/2010	2.6700	106.7782	106.7782	106.7782	104.4375	102.2207	100.6564	99.9315	99.5974
2/7/2008	2/7/2013	8/9/2010	2.4900	106.3765	106.3765	106.3623	104.0119	101.8518	100.4424	99.9807	99.9558
2/13/2008	2/13/2013	2/14/2011	2.9200	107.5264	107.5264	107.5000	105.0972	102.7933	101.0479	99.9496	99.2487
2/14/2008	2/14/2018	2/14/2012	3.1900	124.3707	117.3160	110.2535	105.7878	102.9867	101.0701	99.4428	97.9407
2/19/2008	2/19/2013	8/19/2010	2.5900	106.7189	106.7189	106.6803	104.2362	101.6977	99.2345	96.8438	94.5233
2/22/2008	2/22/2011	2/23/2009	2.5000	101.4304	101.4304	101.4304	101.1675	100.5968	100.0326	99.4747	98.9230
2/25/2008	2/25/2013	2/25/2011	3.0900	108.0677	108.0677	108.0168	105.5377	102.9953	101.0140	99.9354	99.2636
2/25/2008	2/26/2018	8/25/2010	2.4200	118.5252	114.1042	109.3943	105.3574	102.4148	100.6051	99.9418	99.8726
3/7/2008	3/9/2015	3/7/2011	2.8900	113.5015	113.5015	110.4881	106.6145	103.5558	101.3942	100.0340	99.1886
3/7/2008	3/7/2018	3/7/2013	3.5500	127.2737	121.8248	116.0184	110.8892	106.6787	103.1497	100.0926	97.3439
3/10/2008	3/11/2013	9/10/2010	2.3900	106.3328	106.3328	106.2535	103.8162	101.6658	100.3288	99.9077	99.7883
3/11/2008	3/11/2011	3/13/2010	2.0900	101.2945	101.2945	101.2945	100.9958	100.3884	99.9924	99.8578	99.7365
3/12/2008	3/12/2013	9/13/2010	2.0100	105.3314	105.3314	105.2501	102.8704	100.9332	100.0290	99.8481	99.7268
3/14/2008	3/14/2018	9/14/2010	2.4000	118.4347	113.9885	109.3026	105.2861	102.3687	100.5941	99.9330	99.7691
3/17/2008	3/18/2013	3/17/2011	2.6900	107.1801	107.1801	107.0866	104.5926	102.3145	100.6693	99.6560	98.9360
3/17/2008	3/17/2015	3/17/2011	2.6200	112.2982	112.2982	108.9368	104.3635	101.3879	100.1788	99.8653	98.8658
3/17/2008	3/19/2018	3/18/2013	3.3000	125.4229	120.1046	114.4945	109.5636	105.5311	102.1466	99.1805	96.4933
3/25/2008	3/27/2023	3/25/2013	3.1500	128.3501	116.7461	110.9673	106.7059	103.4668	100.6727	98.1083	95.6681
3/26/2008	3/26/2018	3/26/2012	2.9800	122.9818	115.6694	108.9784	105.0796	102.5710	100.6522	98.9847	97.4043
3/28/2008	3/28/2013	3/28/2011	2.8200	107.6055	107.6055	107.4915	104.9036	102.3434	100.6051	99.6342	98.9463
3/28/2008	3/28/2013	3/28/2011	2.8000	107.5515	107.5515	107.4376	104.8502	102.2975	100.5771	99.6188	98.9327
3/28/2008	3/28/2018	9/28/2010	2.0200	115.5421	111.5275	107.3144	103.7285	101.2742	100.0811	99.7998	99.6361
3/28/2008	3/28/2018	3/28/2011	2.7700	121.3649	116.4810	111.3644	106.9511	103.6160	101.3273	99.9113	99.0095
3/31/2008	3/31/2011	9/30/2010	1.9900	101.3431	101.3431	101.3431	101.0025	100.3455	99.9582	99.7866	99.6189
4/14/2008	4/14/2015	4/14/2011	2.7500	113.1224	113.1224	109.5561	104.9073	101.7358	100.3131	99.5101	98.8092
4/28/2008	4/28/2015	4/28/2011	3.2500	115.6348	115.6348	112.2432	108.1251	104.7798	102.2636	100.5366	99.3637
4/28/2008	4/30/2018	10/28/2010	2.1500	116.6757	112.4256	107.9999	104.2496	101.6276	100.2073	99.7403	99.4830
4/30/2008	4/30/2018	4/30/2013	3.7400	129.1465	121.5597	115.1246	110.0320	106.0612	102.7276	99.8009	97.1228
5/2/2008	5/4/2015	5/2/2011	3.9900	119.2615	119.2615	115.7004	111.2784	107.5018	104.2983	101.4910	98.8677
5/5/2008	5/5/2015	5/5/2011	3.1700	115.3116	115.3116	111.9032	107.8221	104.5366	102.0863	100.4182	99.2608
5/8/2008	5/8/2015	8/9/2010	2.9600	114.3218	114.3218	110.9526	106.9770	103.8295	101.5848	100.2884	99.9675
5/19/2008	5/19/2015	5/21/2012	4.7000	122.8850	122.8850	118.9970	114.0314	109.6072	105.5174	101.4240	97.1934
5/19/2008	5/21/2018	5/20/2013	3.8900	130.4928	122.7459	116.1846	110.8933	106.7357	103.2765	100.2405	97.4715
5/23/2008	5/23/2013	5/23/2011	4.0400	111.5245	111.5245	111.2957	108.4830	105.7650	103.2313	100.8022	98.4351
5/23/2008	5/23/2018	5/23/2011	3.2700	125.6084	120.0501	114.3978	109.4805	105.6251	102.7690	100.7875	99.4302
5/27/2008	5/27/2011	5/27/2011	3.2200	102.6831	102.6831	102.6831	102.2192	101.3881	100.5705	99.7661	98.9746
5/27/2008	5/28/2013	5/27/2011	3.4900	110.0039	110.0039	109.7651	106.9277	104.1329	101.8617	100.3380	99.2930
5/29/2008	5/29/2018	5/31/2011	3.4600	127.1419	119.3367	111.3855	105.3221	102.2993	100.9061	99.9793	99.1613
6/6/2008	6/6/2013	6/6/2011	3.9900	111.5370	111.5370	111.2795	108.3914	105.5206	102.9178	100.7114	98.9115
6/10/2008	6/11/2012	9/10/2010	3.9400	107.4527	107.4527	107.4527	106.0167	104.0765	101.9005	99.3375	96.7974
6/16/2008	6/17/2013	6/16/2011	4.0700	111.8927	111.8927	111.6125	108.6796	105.7868	103.2410	101.3049	99.9661
6/24/2008	6/24/2015	6/24/2011	3.8300	119.0316	119.0316	115.1634	110.7125	106.9756	104.0040	101.7711	100.1281
6/30/2008	7/1/2013	9/30/2010	2.9200	108.6457	108.6457	108.3379	105.4882	102.9861	101.1305	100.1064	99.7822
6/30/2008	7/1/2013	9/30/2010	3.4500	110.2151	110.2151	109.9067	106.9982	104.3416	102.1840	100.6900	99.9738
6/30/2008	6/30/2015	9/30/2010	3.3700	116.8019	116.8019	112.9989	108.7452	105.2792	102.6447	100.8693	100.0057
6/30/2008	7/2/2018	6/30/2011	3.6900	129.2200	121.1529	113.0518	106.5673	103.0148	101.3201	100.2138	99.2886
7/1/2008	7/1/2015	7/1/2011	4.6000	122.9475	122.9475	118.7454	113.5844	108.7853	104.7463	101.5852	99.0717
7/7/2008	7/8/2013	7/7/2011	4.5900	113.6800	113.6800	113.3561	110.3240	107.3195	104.4150	101.6870	99.2988
7/8/2008	7/8/2013	7/8/2011	4.2500	112.6666	112.6666	112.3430	109.3229	106.3458	103.5899	101.2258	99.2007
7/10/2008	7/10/2014	7/10/2012	4.8000	119.1989	119.1989	117.2997	113.1889	109.3979	105.9023	102.2961	98.5537
7/11/2008	7/11/2018	7/11/2012	3.7500	129.7701	121.6379	114.2075	108.9896	105.3160	102.6125	100.3889	98.4145
7/14/2008	7/14/2015	7/15/2013	4.9000	124.6211	124.6211	120.3608	115.3466	110.6862	106.1049	101.2524	96.1918
7/14/2008	7/16/2018	10/14/2010	2.5000	119.7518	114.8220	109.9374	105.7733	102.7216	100.7827	99.9496	99.6413
7/14/2008	7/16/2018	7/14/2011	3.2500	125.7916	120.0451	114.3624	109.4387	105.5835	102.7281	100.7069	99.2504
7/17/2008	7/17/2018	7/17/2013	3.7500	129.8155	121.7334	115.5147	110.3403	106.2106	102.7021	99.6051	96.7425
7/21/2008	7/22/2013	10/21/2010	3.0000	109.0576	109.0576	108.7063	105.6782	102.7222	100.5398	99.9563	99.7158
8/15/2008	8/15/2018	8/15/2011	3.8300	130.6591	124.3242	118.0986	112.6386	108.2324	104.8031	102.2304	100.3101
8/19/2008	8/19/2013	8/19/2010	3.4400	110.6536	110.6536	110.2088	107.0763	104.0215	101.0711	100.0094	99.9567
9/8/2008	9/9/2013	9/8/2010	2.8900	109.1187	109.1187	108.5952	105.5772	103.0071	101.1401	100.1336	99.8585
5/13/2009	5/13/2014	5/13/2013	4.0000	115.3545	115.3545	113.7768	109.8853	105.8595	101.2427	96.0140	91.0662
9/28/2009	9/30/2013	9/28/2012	2.9200	109.3837	109.3837	108.7802	105.3908	101.3775	97.3586	94.0268	91.3544
5/11/2010	5/11/2015	5/11/2015	3.7000	117.9334	117.9334	113.7962	108.1070	102.1965	95.9935	89.5363	82.9917
5/24/2010	5/26/2015	5/24/2011	2.2500	110.9987	110.9987	107.1496	102.3398	97.7620	94.1146	93.6297	93.2863
6/15/2010	6/15/2015	6/15/2011	2.2800	111.2720	111.2720	107.2793	102.4150	98.0895	97.7880	95.9134	95.3655