

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	Next Call		Coupon	-300	-200	-100	Base	+100	+200	+300	+400
		Date	Date									
10/2/1996	10/2/2006	1/3/2006		6.5300	103.8875	103.0491	102.2256	101.4171	100.6440	100.0895	99.9311	99.8413
2/27/1997	2/27/2012	2/27/2007		6.5800	126.4707	120.0693	114.0955	108.6895	104.1769	100.9496	98.9783	97.6597
2/11/1998	2/11/2008	2/13/2006		5.5900	107.9112	105.7236	103.5936	101.5826	100.2475	99.8998	99.7102	99.5215
3/13/1998	3/13/2008	12/13/2005		5.5300	108.0616	105.7856	103.5723	101.5070	100.1856	99.9772	99.9412	99.9053
3/18/1998	3/18/2008	12/19/2005		5.6800	108.4627	106.1684	103.9367	101.8251	100.3283	99.9760	99.9262	99.8765
3/24/1998	3/24/2008	12/27/2005		5.6800	108.5364	106.2249	103.9767	101.8492	100.3368	99.9682	99.9019	99.8357
3/26/1998	3/26/2008	12/27/2005		5.4900	108.1241	105.8119	103.5643	101.4759	100.1733	99.9520	99.8802	99.8085
4/8/1998	4/8/2013	1/9/2006		5.4900	122.9411	115.6884	109.2164	103.9964	100.7723	99.9208	99.8088	99.7026
5/6/1998	5/6/2008	2/6/2006		5.7900	109.1652	106.7338	104.3722	102.1329	100.4719	99.9479	99.7692	99.5939
5/8/1998	5/8/2008	2/8/2006		5.5200	108.5390	106.1098	103.7523	101.5676	100.2134	99.8910	99.7097	99.5291
6/1/1998	6/4/2008	3/1/2006		5.5200	108.7782	106.2782	103.8535	101.6088	100.2184	99.8981	99.7277	99.5580
6/16/1998	6/16/2008	12/16/2005		5.4700	108.7944	106.2614	103.8058	101.5467	100.1734	99.9693	99.9251	99.8809
6/16/1998	6/16/2008	12/16/2005		5.7000	109.3729	106.8326	104.3678	102.0465	100.3924	99.9795	99.9352	99.8910
6/24/1998	6/24/2008	12/27/2005		5.4500	108.8372	106.2819	103.8053	101.5326	100.1675	99.9530	99.8867	99.8205
7/31/1998	7/30/2008	1/30/2006		5.3900	109.0092	106.3545	103.7862	101.4609	100.1332	99.8585	99.6918	99.5257
7/31/1998	7/30/2008	1/30/2006		5.6100	109.5883	106.9258	104.3468	101.9450	100.3153	99.8955	99.7288	99.5626
8/19/1998	8/19/2013	2/21/2006		5.4900	123.9364	116.3379	109.6002	104.1919	100.8298	99.9032	99.7585	99.6222
8/25/1998	8/19/2013	1/25/2006		5.4900	123.9364	116.3379	109.6002	104.1919	100.8298	99.9032	99.7585	99.6222
8/27/1998	8/19/2013	1/27/2006		5.4900	123.9364	116.3379	109.6002	104.1919	100.8298	99.9032	99.7585	99.6222
9/30/1998	9/30/2013	12/30/2005		5.2200	122.3085	114.6959	108.0629	102.9882	100.3243	99.9198	99.8343	99.7489
10/5/1998	10/6/2008	1/5/2006		4.4900	107.0036	104.2047	101.6097	100.1189	99.9182	99.8169	99.7159	99.6153
10/13/1998	10/14/2008	1/13/2006		4.6600	107.5571	104.7279	102.0611	100.2631	99.9245	99.8012	99.6784	99.5559
10/13/1998	10/14/2008	1/17/2006		4.6600	107.5571	104.7279	102.0611	100.2631	99.9245	99.8012	99.6784	99.5559
10/20/1998	10/20/2008	1/20/2006		4.6600	107.6140	104.7679	102.0850	100.2713	99.9164	99.7766	99.6373	99.4985
10/30/1998	10/30/2008	10/30/2003		4.9900	108.6571	105.7683	102.9733	100.2687	97.6511	95.1168	92.6631	90.2870
11/25/1998	11/25/2008	11/25/2003		5.2000	109.4638	106.4988	103.6320	100.8596	98.1780	95.5833	93.0728	90.6431
12/7/1998	12/8/2008	12/7/2005		4.9900	108.8863	105.8961	103.0431	100.7603	99.9961	99.9740	99.9518	99.9297
12/14/1998	12/16/2013	12/14/2005		4.8900	120.2734	112.6281	106.1847	101.6875	100.0177	99.9437	99.8995	99.8553
12/14/1998	12/16/2013	12/15/2008		5.3900	124.0161	116.1552	109.2588	103.6958	99.5011	96.2609	93.5042	90.9737
12/15/1998	12/16/2013	12/15/2005		4.8800	120.1986	112.5582	106.1255	101.6504	100.0128	99.9432	99.8990	99.8548
1/13/1999	1/13/2009	1/13/2006		4.9500	109.0437	105.9578	103.0232	100.7180	99.9641	99.8405	99.7204	99.6006
1/13/1999	1/13/2009	1/13/2006		4.9700	109.1051	106.0182	103.0805	100.7547	99.9677	99.8430	99.7228	99.6030
1/15/1999	1/15/2009	1/15/2004		5.1600	109.7097	106.6075	103.6122	100.7195	97.9253	95.2253	92.6163	90.0947
1/19/1999	1/20/2009	1/21/2003		4.9800	109.2080	106.1001	103.0999	100.2027	97.4045	94.7011	92.0892	89.5650
1/29/1999	1/29/2009	1/29/2003		4.9800	109.3009	106.1674	103.1429	100.2230	97.4035	94.6800	92.0491	89.5072
2/18/1999	2/18/2009	2/21/2006		4.8800	109.1152	105.9422	102.9353	100.6357	99.9677	99.8430	99.7228	99.6030
2/18/1999	2/18/2009	2/21/2006		5.0800	109.7477	106.5642	103.5251	101.0115	100.0071	99.9677	99.8430	99.7228
2/18/1999	2/18/2009	2/21/2006		5.4300	110.8546	107.6532	104.5775	101.8230	100.2209	99.9677	99.8430	99.7228
2/19/1999	2/19/2009	2/21/2006		4.8500	109.0303	105.8560	102.8519	100.5887	99.9582	99.8357	99.7155	99.5957
2/22/1999	2/23/2009	2/22/2006		4.8800	109.1654	105.9782	102.9579	100.6454	99.9582	99.8357	99.7155	99.5957
3/22/1999	3/23/2009	12/22/2005		5.0200	109.8008	106.5241	103.4125	100.9125	99.9912	99.9276	99.8640	99.8006
4/13/1999	4/13/2009	1/13/2006		4.9100	109.5686	106.2456	103.1080	100.7016	99.9582	99.8357	99.7155	99.5957
4/23/1999	4/27/2009	1/23/2006		5.1900	110.6453	107.2661	104.0441	101.3190	100.0419	99.8327	99.6743	99.5163
4/23/1999	4/27/2009	1/23/2006		5.5000	111.6806	108.2836	105.0272	102.1058	100.2885	99.8823	99.7238	99.5657
4/26/1999	4/27/2009	1/26/2006		5.1900	110.6453	107.2661	104.0441	101.3190	100.0419	99.8327	99.6743	99.5163
4/26/1999	4/27/2009	1/26/2006		5.5000	111.6806	108.2836	105.0272	102.1058	100.2885	99.8823	99.7238	99.5657
5/6/1999	5/6/2009	2/6/2006		5.3100	111.0523	107.6439	104.3918	101.5838	100.1360	99.8552	99.6794	99.5043
6/7/1999	6/8/2009	12/7/2005		5.7000	112.6726	109.1527	105.7786	102.6999	100.5565	99.9897	99.9675	99.9454
6/7/1999	6/8/2009	12/7/2005		6.0400	113.8445	110.3041	106.9032	103.7223	101.1848	100.0573	99.9750	99.9529
7/1/1999	7/1/2009	1/3/2006		6.1100	114.2884	110.6787	107.2077	103.8692	100.8829	99.9831	99.8958	99.8088
7/23/1999	7/23/2009	1/23/2006		5.4000	112.0503	108.4214	104.9630	101.9369	100.2142	99.8745	99.7269	99.5798
9/8/1999	9/8/2009	12/8/2005		5.6200	113.2033	109.4360	105.8417	102.6190	100.4800	99.9879	99.9657	99.9436
10/8/1999	10/8/2009	1/9/2006		5.5800	113.3092	109.4604	105.7961	102.5379	100.4338	99.9250	99.8185	99.7123
11/1/1999	11/2/2009	2/1/2006		5.5400	113.3579	109.4471	105.7306	102.4521	100.4052	99.9069	99.7402	99.5760
11/8/1999	11/9/2009	2/8/2006		5.9600	115.0539	111.0910	107.3059	103.8242	101.1449	100.0234	99.7911	99.6076
11/9/1999	11/9/2009	2/9/2006		5.5700	113.5553	109.6218	105.8820	102.5675	100.4524	99.9013	99.7149	99.5316
12/10/1999	12/10/2009	12/12/2005		5.7100	114.3634	110.3318	106.4968	103.0536	100.6632	99.9874	99.9597	99.9320
12/17/1999	12/17/2009	12/19/2005		5.9100	115.2367	111.1687	107.2907	103.7474	101.0725	100.0071	99.9411	99.8941
12/20/1999	12/21/2009	12/20/2005		5.8100	114.8925	110.8206	106.9431	103.4286	100.8699	99.9796	99.9216	99.8636
12/22/1999	12/22/2009	12/22/2005		5.8400	115.0235	110.9463	107.0625	103.5335	100.9334	99.9805	99.9197	99.8590
1/7/2000	1/7/2015	1/9/2006		5.9500	131.2169	122.1500	114.1471	107.5141	102.7003	100.3033	99.8616	99.7581
1/12/2000	1/12/2010	1/12/2005		6.8500	119.2267	115.0113	110.9766	107.1140	103.4151	99.8717	96.4768	93.2232
1/13/2000	1/13/2010	1/13/2006		5.9100	115.4737	111.3317	107.3874	103.7910	101.0873	99.9928	99.8368	99.7169
1/25/2000	1/25/2010	1/25/2006		5.9700	115.8685	111.6860	107.7017	104.0523	101.2430	100.0149	99.8052	99.6525
1/27/2000	1/27/2010	1/27/2006		6.0800	116.3392	112.1416	108.1398	104.4495	101.5091	100.0933	99.8164	99.6582
1/27/2000	1/27/2010	1/27/2006		6.2100	116.8652	112.6568	108.6414	104.9128	101.8568	100.2043	99.8371	99.6789
2/7/2000	2/8/2010	2/7/2006		5.9500	115.8778	111.6679	107.6598	103.9979	101.2004	100.0262	99.7924	99.6117

Start Date	Next Call		Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Maturity	Date									
2/16/2000	2/8/2010	2/1/2006	5.9500	115.8778	111.6679	107.6598	103.9979	101.2004	100.0262	99.7924	99.6117
2/16/2000	2/16/2010	2/16/2006	6.4700	118.1099	113.8320	109.7476	105.9193	102.6326	100.5413	99.7924	99.6117
2/16/2000	2/16/2010	2/16/2006	6.6900	119.0109	114.7144	110.6096	106.7393	103.3213	100.9001	99.7924	99.6117
3/6/2000	3/8/2010	12/6/2005	6.3900	117.9464	113.6141	109.4835	105.6333	102.3827	100.4030	99.9827	99.9606
3/13/2000	3/15/2010	12/13/2005	6.0900	116.7948	112.4678	108.3503	104.5680	101.5670	100.1316	99.9554	99.9139
3/14/2000	3/15/2010	2/14/2006	6.0900	116.7948	112.4678	108.3503	104.5680	101.5670	100.1316	99.9554	99.9139
3/15/2000	3/15/2010	12/15/2005	5.9500	116.2118	111.8973	107.7969	104.0650	101.2261	100.0358	99.9496	99.9081
3/21/2000	3/22/2010	12/21/2005	6.1200	117.0124	112.6618	108.5215	104.7118	101.6639	100.1537	99.9367	99.8760
3/22/2000	3/22/2010	12/22/2005	5.9600	116.3432	112.0069	107.8860	104.1322	101.2635	100.0375	99.9270	99.8663
3/28/2000	3/28/2007	12/28/2005	6.1100	105.5578	104.2350	102.9374	101.6687	100.5536	99.9973	99.9190	99.8418
4/5/2000	4/5/2010	1/5/2006	5.9500	116.3791	112.0105	107.8617	104.0915	101.2311	100.0243	99.8683	99.7703
4/11/2000	4/12/2010	1/11/2006	5.9500	116.4685	112.0791	107.9110	104.1229	101.2452	100.0201	99.8449	99.7277
4/11/2000	4/12/2010	1/11/2006	6.0500	116.8920	112.4934	108.3126	104.4877	101.4863	100.0897	99.8568	99.7396
4/11/2000	4/12/2010	1/11/2006	6.4700	118.6706	114.2337	110.0055	106.0588	102.6898	100.5407	99.9122	99.7893
4/11/2000	4/12/2010	1/11/2006	6.5600	119.0517	114.6067	110.3692	106.4019	102.9745	100.6817	99.9326	99.8000
4/11/2000	4/12/2010	1/11/2006	6.7500	119.8563	115.3941	111.1378	107.1329	103.5934	101.0413	99.9913	99.8225
4/12/2000	4/12/2010	1/12/2006	5.9900	116.6379	112.2448	108.0715	104.2680	101.3381	100.0463	99.8497	99.7325
4/13/2000	4/13/2010	1/13/2006	6.5600	119.0661	114.6181	110.3777	106.4078	102.9780	100.6827	99.9310	99.7956
4/24/2000	4/24/2007	1/24/2006	6.1600	105.9281	104.5334	103.1653	101.8259	100.6311	100.0045	99.8372	99.6872
4/24/2000	4/26/2010	1/24/2006	6.4500	118.7833	114.3058	110.0405	106.0623	102.6721	100.5202	99.8809	99.7218
5/2/2000	5/2/2007	2/2/2006	6.1000	105.8781	104.4619	103.0724	101.7143	100.5384	100.0152	99.8388	99.6745
5/3/2000	5/3/2010	2/3/2006	6.2400	117.8705	113.3956	109.1414	105.2192	102.0170	100.2670	99.8626	99.6938
5/3/2000	5/3/2010	2/3/2006	6.3600	118.3849	113.8988	109.6307	105.6748	102.3661	100.4112	99.8863	99.7152
5/15/2000	5/17/2010	2/15/2006	6.9900	121.3029	116.7147	112.3410	108.2152	104.5051	101.6232	100.1774	99.8863
5/30/2000	6/1/2010	2/28/2006	6.4900	119.2463	114.6685	110.3139	106.2617	102.8138	100.6065	100.4112	99.8863
6/5/2000	6/5/2007	12/5/2005	6.4200	106.7492	105.2376	103.7558	102.3044	100.9564	100.1356	99.9058	99.7596
6/7/2000	6/5/2007	2/7/2006	6.4200	106.7492	105.2376	103.7558	102.3044	100.9565	100.1394	99.8890	99.7164
6/21/2000	6/21/2007	12/21/2005	6.2000	106.6376	105.0827	103.5589	102.0684	100.7351	100.0336	99.9442	99.8862
6/23/2000	6/25/2007	12/23/2005	6.3600	106.9432	105.3748	103.8378	102.3331	100.9445	100.1026	99.9448	99.8758
8/8/2000	8/8/2007	2/8/2006	6.0300	106.8540	105.1677	103.5175	101.9115	100.5614	99.9990	99.8078	99.6271
8/8/2000	8/9/2010	2/8/2006	5.9900	117.7269	113.0030	108.5390	104.5148	101.4356	100.0717	99.7969	99.6135
8/18/2000	8/18/2010	2/21/2006	6.0900	118.2984	113.5368	109.0329	104.9411	101.7265	100.1533	99.7969	99.6135
8/25/2000	8/27/2007	2/27/2006	5.9500	106.9682	105.2285	103.5268	101.8745	100.5148	100.1533	99.7969	99.6135
9/18/2000	9/18/2007	12/19/2005	5.9800	107.2370	105.4397	103.6824	101.9754	100.5554	99.9909	99.9411	99.8914
10/5/2000	10/5/2010	1/5/2006	5.7100	116.9274	112.0789	107.5301	103.5501	100.8116	99.9558	99.8444	99.7465
10/10/2000	10/12/2010	1/10/2006	5.8400	117.6225	112.7380	108.1444	104.0689	101.1196	99.9811	99.8319	99.7147
10/13/2000	10/13/2010	1/13/2006	5.7500	117.2121	112.3352	107.7566	103.7312	100.9116	99.9556	99.8174	99.6975
10/23/2000	10/25/2010	1/23/2006	5.6400	116.8383	111.9389	107.3508	103.3658	100.7012	99.9124	99.7543	99.6017
10/27/2000	10/27/2010	1/27/2006	6.0400	118.7560	113.8037	109.1355	104.9296	101.6838	100.1311	99.8100	99.6518
10/30/2000	10/30/2007	1/30/2006	5.8500	107.4603	105.5456	103.6756	101.8708	100.4514	99.9366	99.7691	99.6028
11/8/2000	11/8/2007	2/8/2006	5.9400	107.6759	105.7397	103.8493	102.0197	100.5376	99.9772	99.7905	99.6098
12/5/2000	12/6/2010	12/5/2005	5.4100	116.0104	111.0311	106.4147	102.5626	100.3287	99.9874	99.9708	99.9542
12/11/2000	12/13/2010	12/12/2005	5.1700	114.9253	109.9586	105.4048	101.7920	100.1141	99.9643	99.9283	99.8924
12/12/2000	12/13/2010	12/12/2005	5.1100	114.6343	109.6763	105.1452	101.6090	100.0679	99.9621	99.9261	99.8902
12/15/2000	12/15/2010	12/15/2005	5.1200	114.7039	109.7386	105.1984	101.6442	100.0752	99.9567	99.9152	99.8738
12/20/2000	12/20/2010	12/20/2005	4.7800	113.1013	108.1758	103.7885	100.7637	99.9790	99.9237	99.8684	99.8132
12/20/2000	12/20/2010	12/20/2005	4.9500	113.9289	108.9750	104.4972	101.1743	99.9884	99.9330	99.8778	99.8226
12/21/2000	12/21/2010	12/21/2005	4.8600	113.5006	108.5584	104.1243	100.9530	99.9826	99.9245	99.8665	99.8086
12/26/2000	12/27/2010	12/27/2005	4.8000	113.2665	108.3176	103.9002	100.8215	99.9733	99.8987	99.8242	99.7498
12/29/2000	12/29/2005	12/29/2005	5.3300	100.3359	100.2552	100.1746	100.0942	100.0139	99.9338	99.8537	99.7738
1/11/2001	1/11/2011	1/11/2006	5.3700	116.1123	111.0410	106.3580	102.4916	100.3314	99.8959	99.7811	99.6667
1/12/2001	1/12/2011	1/12/2006	5.3000	115.7787	110.7144	106.0523	102.2542	100.2438	99.8854	99.7679	99.6508
1/16/2001	1/18/2011	1/17/2006	4.7800	113.2756	108.2755	103.8319	100.7712	99.9360	99.8010	99.6672	99.5338
1/19/2001	1/19/2011	1/19/2006	5.8300	118.4756	113.3190	108.4915	104.2461	101.1932	99.9969	99.8053	99.6690
1/22/2001	1/24/2011	1/23/2006	4.5000	111.9460	106.9852	102.7323	100.2881	99.8867	99.7360	99.5858	99.4361
1/26/2001	1/26/2011	1/26/2006	4.7200	113.0551	108.0435	103.6166	100.6560	99.9177	99.7615	99.6058	99.4507
2/5/2001	2/7/2011	2/6/2006	4.5800	112.3824	107.3782	103.0417	100.4171	99.8935	99.7142	99.5358	99.3582
2/5/2001	2/7/2011	2/6/2006	4.8200	113.5795	108.5283	104.0257	100.8763	99.9439	99.7598	99.5813	99.4036
2/7/2001	2/7/2011	2/7/2006	4.8200	113.5795	108.5283	104.0257	100.8763	99.9439	99.7598	99.5813	99.4036
2/12/2001	2/14/2011	2/13/2006	4.4000	111.5451	106.5628	102.3729	100.1936	99.8447	99.6462	99.4489	99.2523
2/12/2001	2/14/2011	2/13/2006	4.5700	112.3960	107.3742	103.0278	100.4094	99.8803	99.6818	99.4844	99.2878
2/26/2001	2/28/2011	2/27/2006	4.5000	112.1627	107.1117	102.7892	100.2970	99.8447	99.6462	99.4489	99.2523
2/26/2001	2/28/2011	2/27/2006	4.7900	113.6251	108.5137	103.9737	100.8265	99.8803	99.6818	99.4844	99.2878
2/26/2001	2/28/2011	2/27/2006	5.0600	114.9869	109.8286	105.1444	101.5431	100.2970	99.8447	99.6462	99.4489
2/26/2001	2/28/2011	2/27/2006	5.4500	116.9541	111.7366	106.9066	102.8571	100.4284	99.7911	99.5448	99.3021
2/27/2001	2/28/2011	2/27/2006	4.7600	113.4738	108.3681	103.8470	100.7563	100.2970	99.8447	99.6462	99.4489
2/27/2001	2/28/2011	2/27/2006	5.0200	114.7852	109.6335	104.9679	101.4221	100.7563	100.2970	99.8447	99.6462

Start Date	Maturity	Next Call		Coupon	-300	-200	-100	Base	+100	+200	+300	+400
		Date	Date									
3/1/2001	3/1/2011	3/1/2006		5.2700	115.9505	110.7650	106.0075	102.1690	100.1736	99.7051	99.4610	99.2191
3/5/2001	3/7/2011	12/5/2005		3.9900	109.5442	104.6488	101.0173	99.9967	99.9773	99.9579	99.9385	99.9191
3/12/2001	3/13/2006	12/12/2005		4.4200	100.8402	100.5554	100.2725	100.0170	99.9733	99.9373	99.9014	99.8655
3/12/2001	3/14/2011	12/12/2005		4.8100	113.7571	108.6112	104.0438	100.8683	99.9864	99.9476	99.9089	99.8702
3/14/2001	3/14/2011	12/14/2005		4.8600	114.0109	108.8556	104.2582	100.9901	99.9883	99.9495	99.9108	99.8721
3/19/2001	3/20/2006	12/19/2005		4.3800	100.8912	100.5869	100.2847	100.0150	99.9569	99.9015	99.8463	99.7912
3/19/2001	3/21/2011	12/19/2005		4.0700	110.0569	105.0895	101.2794	99.9949	99.9367	99.8787	99.8207	99.7628
3/20/2001	3/21/2011	12/20/2005		3.9300	109.3450	104.4388	100.8896	99.9867	99.9286	99.8705	99.8126	99.7547
3/26/2001	3/27/2006	12/27/2005		4.5400	101.0055	100.6817	100.3600	100.0511	99.9539	99.8793	99.8048	99.7305
3/26/2001	3/28/2011	12/27/2005		3.9900	109.7029	104.7498	101.0640	99.9871	99.9096	99.8323	99.7551	99.6781
4/10/2001	4/11/2011	1/10/2006		4.6500	113.1054	107.9228	103.4116	100.5421	99.9275	99.8124	99.6978	99.5835
4/10/2001	4/11/2011	4/10/2006		5.1500	115.6778	110.3863	105.3805	101.1836	99.8892	99.5301	99.1828	98.8382
4/17/2001	4/17/2006	1/17/2006		4.3300	101.0636	100.6855	100.3106	100.0091	99.8767	99.7452	99.6142	99.4836
4/23/2001	4/25/2011	4/24/2006		5.3500	116.8625	111.5033	106.4346	101.8816	100.0083	99.5722	99.1872	98.8052
5/8/2001	5/9/2011	2/8/2006		4.4300	112.1110	106.9129	102.5592	100.2302	99.8609	99.6762	99.4924	99.3094
6/1/2001	6/1/2011	3/1/2006		4.9900	115.1603	109.7815	104.9565	101.3678	100.0219	99.9967	99.9940	99.9912
7/13/2001	7/13/2006	1/13/2006		5.2400	102.1671	101.5491	100.9392	100.3538	100.0210	99.8757	99.7555	99.6357
8/14/2001	8/14/2006	2/14/2006		4.8300	102.1514	101.4482	100.7560	100.1733	99.9347	99.7362	99.5387	99.3420
8/20/2001	8/22/2011	8/21/2006		5.0900	116.3178	110.6764	105.3654	101.1755	99.6166	98.8957	98.2205	97.5549
9/4/2001	9/6/2011	9/5/2006		4.8800	115.2119	109.5687	104.2903	100.6227	99.3759	98.6498	97.9477	97.2566
11/5/2001	11/7/2011	5/5/2006		3.8500	109.7745	104.1365	100.2952	99.6595	99.2382	98.8210	98.4081	97.9990
12/4/2001	12/5/2011	12/4/2006		4.5900	114.1048	108.2725	102.9874	99.9726	98.7909	97.8560	96.9441	96.0485
12/5/2001	12/5/2011	12/5/2006		4.6000	114.1621	108.3281	103.0360	99.9934	98.8011	97.8660	96.9539	96.0583
12/13/2001	12/13/2011	12/13/2006		4.9200	116.0756	110.2066	105.0336	101.2480	99.2614	98.1654	97.2241	96.3069
1/14/2002	1/17/2012	1/17/2006		3.9500	110.6575	105.0725	101.0800	99.9591	99.8264	99.6949	99.5639	99.4334
1/31/2002	1/31/2012	1/31/2007		4.8900	116.2716	110.2337	104.6429	100.7273	99.0231	97.9135	96.8564	95.8191
2/11/2002	2/12/2007	2/13/2006		4.0900	102.6058	101.4288	100.3708	99.9795	99.7856	99.5927	99.4009	99.2098
2/15/2002	2/15/2007	2/15/2006		4.1100	102.6542	101.4687	100.3891	99.9832	99.7811	99.5800	99.3800	99.1808
3/20/2002	3/20/2007	12/20/2005		4.4700	103.3126	102.0272	100.7991	100.0774	99.9618	99.9065	99.8513	99.7961
4/8/2002	4/9/2007	1/9/2006		4.3700	103.2943	101.9597	100.6935	100.0418	99.8993	99.7898	99.6807	99.5719
4/25/2002	4/25/2007	1/25/2006		4.3500	103.4073	102.0283	100.7223	100.0449	99.8617	99.7083	99.5554	99.4031
4/26/2002	4/26/2012	4/26/2007		4.9200	116.9750	110.7114	104.9544	100.8819	98.8854	97.5383	96.2734	95.0345
5/2/2002	5/2/2007	2/2/2006		4.2900	103.3108	101.9135	100.6076	100.0185	99.8503	99.6847	99.5201	99.3561
5/14/2002	5/14/2007	5/16/2005		4.2400	103.3413	101.9110	100.5081	99.1319	97.7816	96.4564	95.1557	93.8792
5/14/2002	5/14/2007	2/14/2006		4.2200	103.3123	101.8823	100.5637	100.0075	99.8070	99.6086	99.4113	99.2148
6/3/2002	6/4/2012	12/5/2005		4.4900	114.4832	108.3283	103.2637	100.4122	99.9925	99.9814	99.9703	99.9593
6/4/2002	6/4/2012	12/5/2005		4.4900	114.4832	108.3283	103.2637	100.4122	99.9925	99.9814	99.9703	99.9593
6/19/2002	6/19/2007	12/19/2005		3.9900	103.1882	101.6669	100.3596	99.9911	99.9385	99.8860	99.8335	99.7811
6/24/2002	6/25/2012	6/25/2007		4.3900	114.0416	107.7320	102.4017	99.5041	97.8773	96.4455	95.0485	93.6791
6/28/2002	6/28/2007	12/28/2005		3.7900	102.9435	101.4014	100.2160	99.9716	99.8941	99.8168	99.7397	99.6626
7/8/2002	7/9/2007	1/9/2006		3.8300	103.0086	101.4363	100.2145	99.9496	99.8397	99.7302	99.6211	99.5124
7/12/2002	7/12/2007	1/12/2006		3.7700	102.9340	101.3551	100.1805	99.9397	99.8216	99.7039	99.5866	99.4697
7/24/2002	7/24/2007	1/24/2006		3.5900	102.7242	101.1209	100.1030	99.8997	99.7485	99.5980	99.4480	99.2985
7/25/2002	7/25/2007	1/25/2006		3.5800	102.7144	101.1091	100.1000	99.8966	99.7427	99.5894	99.4367	99.2845
7/26/2002	7/26/2012	7/26/2007		3.8900	111.0406	104.8241	100.5221	98.4891	96.9431	95.4504	93.9884	92.5562
8/7/2002	8/7/2007	2/7/2006		3.2900	102.2385	100.6446	100.0089	99.8280	99.6481	99.4690	99.2910	99.1137
8/12/2002	8/13/2007	2/13/2006		3.2900	102.2736	100.6633	100.0111	99.8137	99.6173	99.4219	99.2276	99.0341
8/28/2002	8/28/2007	2/28/2006		3.2900	102.3613	100.7099	100.0167	99.7781	99.5407	99.3046	99.0697	98.8358
11/4/2002	11/5/2012	11/5/2007		3.3500	107.8134	102.0161	99.0331	97.1607	95.4093	93.7003	92.0307	90.3996
11/21/2002	11/21/2012	11/21/2007		3.4400	108.4976	102.5166	99.2593	97.3032	95.5096	93.7614	92.0541	90.3866
12/2/2002	12/3/2012	12/2/2005		2.9000	105.1031	100.6712	99.9978	99.9895	99.9812	99.9729	99.9646	99.9563
12/5/2002	12/5/2012	12/5/2005		3.7900	110.8111	104.7062	100.7747	99.9948	99.9810	99.9671	99.9533	99.9395
2/25/2003	2/25/2008	2/27/2006		2.8500	101.9984	100.2365	99.9096	99.6796	99.4506	99.2227	98.9961	98.7705
3/4/2003	3/4/2008	12/5/2005		2.8100	101.8636	100.1686	99.9961	99.9850	99.9739	99.9629	99.9518	99.9407
3/6/2003	3/6/2013	3/6/2008		2.9900	105.8212	100.8193	98.0118	95.8795	93.8570	91.8896	89.9737	88.1077
3/11/2003	12/12/2005	12/12/2005		5.5900	100.1476	100.1142	100.0808	100.0475	100.0142	99.9809	99.9477	99.9145
3/11/2003	12/13/2005	12/13/2005		5.4200	100.1538	100.1176	100.0814	100.0453	100.0093	99.9732	99.9373	99.9013
3/11/2003	1/24/2011	1/23/2006		4.6900	112.8874	107.8873	103.4861	100.5982	99.9155	99.7648	99.6146	99.4649
3/11/2003	2/7/2011	2/6/2006		4.5800	112.3824	107.3782	103.0417	100.4171	99.8935	99.7142	99.5358	99.3582
12/9/2003	12/9/2008	12/11/2006		2.8300	102.4720	100.0712	98.9215	97.9554	97.0081	96.0780	95.1651	94.2687
1/20/2004	1/22/2008	1/20/2006		2.6600	101.5044	100.1043	99.9123	99.7665	99.6211	99.4762	99.3318	99.1878
1/27/2004	1/27/2009	1/27/2006		2.8900	102.7945	100.3554	99.9424	99.7828	99.6236	99.4650	99.3070	99.1495
2/3/2004	2/5/2007	2/3/2006		2.5600	100.7367	100.0490	99.8727	99.6977	99.5234	99.3501	99.1777	99.0060
2/5/2004	12/22/2005	12/22/2005		5.3900	100.2584	100.1972	100.1361	100.0750	100.0140	99.9532	99.8924	99.8317
2/5/2004	2/14/2006	2/14/2006		4.7700	100.7261	100.5236	100.3222	100.1217	99.9899	99.9511	99.9123	99.8736
2/5/2004	2/20/2008	2/21/2006		5.4800	107.7770	105.5663	103.4147	101.4072	100.1797	99.9496	99.8999	99.8502
2/5/2004	12/18/2008	12/19/2005		5.1500	109.4700	106.4437	103.5196	100.7100	99.9995	99.9496	99.8999	99.8502

Start Date	Next Call		Coupon	-300	-200	-100	Base	+100	+200	+300	+400
	Maturity	Date									
2/5/2004	4/26/2010	1/24/2006	6.2000	117.7154	113.2611	109.0251	105.1201	101.9499	100.2356	99.8385	99.6827
2/5/2004	12/14/2010	12/14/2005	5.8200	118.0905	113.0350	108.2955	104.1172	101.1183	99.9978	99.9479	99.9092
2/9/2004	2/9/2007	2/9/2006	2.5900	100.7875	100.0596	99.8720	99.6860	99.5008	99.3165	99.1332	98.9507
2/9/2004	2/9/2009	2/9/2006	3.1100	103.4715	100.7162	99.9741	99.7879	99.6026	99.4181	99.2347	99.0521
2/17/2004	2/20/2007	2/17/2006	2.4100	100.6159	100.0313	99.8141	99.5979	99.3827	99.1686	98.9556	98.7436
2/17/2004	2/17/2009	2/17/2006	2.9100	102.8850	100.3734	99.9294	99.7213	99.5141	99.3080	99.1030	98.8988
2/26/2004	2/26/2007	2/27/2006	2.4100	100.6366	100.0355	99.8018	99.5692	99.3376	99.1072	98.8781	98.6500
3/4/2004	3/4/2009	12/5/2005	2.9700	103.0536	100.4424	99.9979	99.9868	99.9757	99.9646	99.9536	99.9425
3/12/2004	3/12/2007	12/12/2005	2.2200	100.3924	100.0021	99.9688	99.9355	99.9023	99.8692	99.8360	99.8029
3/12/2004	3/12/2009	12/12/2005	2.6900	102.2061	100.1320	99.9844	99.9511	99.9179	99.8847	99.8516	99.8185
3/17/2004	3/19/2007	12/19/2005	2.1800	100.3702	100.0012	99.9485	99.8959	99.8434	99.7909	99.7385	99.6862
4/1/2004	4/1/2009	1/3/2006	2.7700	102.4638	100.1823	99.9509	99.8630	99.7753	99.6879	99.6008	99.5141
4/30/2004	4/30/2009	5/1/2006	2.5900	102.0020	100.0197	99.5000	99.0112	98.5270	98.0475	97.5730	97.1028
5/24/2004	5/26/2009	2/24/2006	3.5800	105.3690	102.0995	100.1672	99.8532	99.6212	99.3903	99.1608	98.9321
5/28/2004	5/28/2009	5/30/2006	3.7000	105.7923	102.4824	100.2411	99.5694	99.0912	98.6181	98.1500	97.6861
6/11/2004	6/11/2009	12/12/2005	3.7500	105.9728	102.6237	100.3265	99.9875	99.9570	99.9265	99.8961	99.8658
6/18/2004	6/20/2011	6/19/2006	4.1200	110.7276	105.5320	101.5147	99.7939	99.1940	98.6666	98.1457	97.6305
6/18/2004	6/18/2014	6/18/2007	3.6200	111.3570	104.4648	100.2349	98.1992	96.7306	95.3310	93.9598	92.6152
7/2/2004	7/2/2014	7/3/2006	3.9900	114.2145	106.8356	101.7087	99.6724	99.0121	98.4563	97.9088	97.3681
8/5/2004	8/5/2009	2/6/2006	3.4700	105.1607	101.7888	100.0757	99.8661	99.6916	99.5180	99.3454	99.1734
9/1/2004	9/1/2009	3/1/2006	3.1500	104.0733	100.8975	99.9132	99.6642	99.4183	99.1741	98.9316	98.6906
9/2/2004	9/2/2009	3/2/2006	3.0700	103.7876	100.7059	99.8915	99.6412	99.3926	99.1456	98.9005	98.6568
9/14/2004	9/14/2009	9/14/2006	2.8700	103.1190	100.2842	99.2805	98.5283	97.7888	97.0609	96.3447	95.6396
9/15/2004	9/15/2009	12/15/2005	2.9900	103.5620	100.5693	99.9930	99.9514	99.9099	99.8684	99.8270	99.7856
9/20/2004	9/21/2009	9/20/2006	2.9600	103.4688	100.3617	99.3475	98.5768	97.8186	97.0723	96.3381	95.6152
9/27/2004	9/28/2009	12/27/2005	3.1700	104.2934	101.0228	100.0027	99.9235	99.8461	99.7689	99.6917	99.6147
11/23/2004	11/23/2009	11/24/2006	3.2600	104.7588	101.1260	99.4343	98.4994	97.5923	96.7021	95.8287	94.9713
11/23/2004	11/23/2009	11/24/2006	3.2700	104.7976	101.1573	99.4454	98.5091	97.6020	96.7117	95.8382	94.9808
12/10/2004	12/10/2009	12/12/2005	2.7800	102.9085	100.2241	99.9895	99.9618	99.9341	99.9064	99.8788	99.8512
12/13/2004	12/15/2014	12/13/2007	3.3200	109.4309	102.8413	99.1315	96.9650	95.1027	93.3023	91.5457	89.8313
12/17/2004	12/17/2009	12/19/2005	3.7100	106.5692	102.7903	100.3253	99.9789	99.9318	99.8848	99.8378	99.7909
12/20/2004	12/21/2009	12/20/2005	2.8700	103.3026	100.3726	99.9833	99.9251	99.8670	99.8090	99.7511	99.6933
1/27/2005	1/27/2010	1/27/2006	3.1500	104.4953	101.0186	99.9841	99.8245	99.6652	99.5066	99.3485	99.1910
3/22/2005	3/22/2010	3/22/2007	4.0200	108.2296	104.1305	100.8603	99.0076	97.7390	96.5442	95.3723	94.2218
4/28/2005	4/28/2010	4/30/2007	3.8600	107.7341	103.5112	100.3194	98.6850	97.3704	96.0895	94.8325	93.5989
4/28/2005	4/28/2010	4/30/2007	3.9200	107.9916	103.8296	100.6133	98.7927	97.4532	96.1710	94.9135	93.6792
5/5/2005	5/5/2010	5/5/2006	4.1900	109.0992	104.8633	101.3992	99.8668	99.3906	98.9783	98.5704	98.1662
5/17/2005	5/17/2010	5/17/2006	4.0700	108.6781	104.4377	101.0961	99.7811	99.3042	98.8600	98.4204	97.9848
6/6/2005	6/7/2010	6/6/2006	3.8900	107.9561	103.7261	100.6554	99.6182	99.1109	98.6187	98.1323	97.6513
7/18/2005	7/19/2010	7/18/2006	4.1600	109.3665	104.9528	101.3913	99.7418	99.0661	98.4653	97.8730	97.2881
7/25/2005	7/26/2010	7/25/2008	4.2300	109.7375	105.2824	101.4547	98.4817	95.9901	93.6690	91.4304	89.2592
8/1/2005	8/1/2008	8/1/2006	4.2700	105.9939	103.3805	101.0328	99.7252	99.0398	98.4118	97.7935	97.1839
8/17/2005	8/17/2015	8/17/2006	4.0300	115.8851	106.9177	100.8407	99.5167	98.8325	98.1635	97.5043	96.8544
9/1/2005	9/1/2015	9/1/2006	4.1300	116.8830	108.5825	102.6293	99.7973	98.8149	98.1092	97.4224	96.7462
9/12/2005	9/14/2015	9/12/2007	3.6500	112.8008	105.1670	100.4127	97.9872	96.2749	94.6717	93.1073	91.5769
9/19/2005	9/19/2012	9/19/2007	3.8200	110.7931	104.7924	100.6140	98.2702	96.5503	94.9332	93.3547	91.8106
9/26/2005	9/27/2010	9/26/2006	3.8000	108.0479	103.5907	100.4777	99.2564	98.4688	97.7040	96.9516	96.2108
9/26/2005	9/26/2012	9/26/2007	3.8900	111.2898	105.2087	100.8918	98.5316	96.8888	95.3614	93.8712	92.4133
9/30/2005	9/30/2015	9/30/2008	4.4400	119.8469	111.1280	104.3556	99.7089	96.4815	93.8560	91.4475	89.1404
10/3/2005	10/4/2010	10/3/2006	3.9500	108.6907	104.1665	100.7885	99.3050	98.4800	97.7029	96.9397	96.1895
10/3/2005	10/4/2010	10/3/2006	4.1200	109.4828	104.8109	100.9364	99.4310	98.6215	97.8439	97.0801	96.3293
10/3/2005	10/3/2012	10/3/2007	4.1500	112.8889	106.4203	101.4317	98.8011	97.0159	95.3610	93.7472	92.1695
10/11/2005	10/12/2010	10/11/2006	4.0500	109.2194	104.6368	101.0791	99.4066	98.5408	97.7421	96.9582	96.1874
10/19/2005	10/19/2010	10/19/2006	4.1200	109.6031	104.9791	101.3076	99.4906	98.5823	97.7648	96.9628	96.1742
10/26/2005	10/26/2015	10/27/2008	4.5400	120.8309	111.9727	105.0029	100.1237	96.7176	93.9864	91.5092	89.1487
10/28/2005	10/28/2015	10/29/2007	4.1400	117.2797	108.8343	102.6990	99.1246	96.9830	95.2278	93.5528	91.9193
10/28/2005	10/28/2015	10/28/2008	4.3100	118.7922	110.1507	103.5708	99.1196	95.9692	93.3342	90.8862	88.5351
11/4/2005	11/4/2010	11/6/2006	4.2900	110.4370	105.7351	101.8443	99.6626	98.6331	97.7819	96.9516	96.1367
11/4/2005	11/4/2010	11/5/2007	4.5200	111.5295	106.7752	102.6508	99.6860	97.6179	95.8487	94.1577	92.5089
11/21/2005	11/21/2012	11/21/2007	4.2900	114.0982	107.6361	102.5705	100.1314	99.6568	99.3576	99.0608	98.7656
12/1/2005	12/3/2012	12/1/2006	4.0700	112.6281	106.2952	101.6258	99.3635	98.2929	97.3736	96.4743	95.5913
12/2/2005	12/2/2010	12/4/2006	4.2300	110.1579	105.3296	101.3880	99.1813	98.0353	97.0429	96.0728	95.1203
12/2/2005	12/2/2015	3/2/2006	3.7500	113.7205	105.7349	100.7770	99.4904	99.1607	98.8406	98.5229	98.2070