

APPENDIX B

With the passage of the Investor and Capital Markets Relief Act, Congress has established a target amount of monies to be collected from fees charged to investors based on the value of their transactions. This appendix provides the formula for determining such fees, which the Commission adjusts annually, and may adjust semi-annually.¹ In order to maximize the likelihood that the amount of monies targeted by Congress will be collected, the fee rate must be set to reflect projected dollar transaction volume on the securities exchanges and the Nasdaq over the course of the year. As a percentage, the fee rate equals the ratio of the target amounts of monies to the projected dollar transaction volume.

For 2005, the Commission has estimated dollar transaction volume by projecting forward the trend established in the previous decade. More specifically, dollar transaction volume was forecasted for months subsequent to March 2004, the last month for which the Commission has data on transaction volume.

The following sections describe this process in detail.

A. Baseline estimate of the aggregate dollar amount of sales for fiscal year 2005.

First, calculate the average daily dollar amount of sales (ADS) for each month in the sample (March 1994 - March 2004). The data obtained from the exchanges and the NASD are presented in Table B. The monthly aggregate dollar amount of sales (exchange plus Nasdaq) is contained in column E.

Next, calculate the change in the natural logarithm of ADS from month-to-month. The average monthly percentage growth of ADS over the entire sample is 0.014 and the standard deviation 0.118. Assuming the monthly percentage change in ADS follows a random walk,

¹ Congress requires that the Commission make a mid-year adjustment to the fee rate if 4 months into the fiscal year it determines that its forecasts of aggregate dollar volume are reasonably likely to be off by 10% or more.

calculating the expected monthly percentage growth rate for the full sample is straightforward. The expected monthly percentage growth rate of ADS is 2.2 percent.

Now, use the expected monthly percentage growth rate to forecast total dollar volume. For example, one can use the ADS for March 2004 (\$114,370,494,465) to forecast ADS for April 2004 ($\$116,834,236,575 = \$114,370,494,465 \times 1.022$)². Multiply by the number of trading days in April 2004 (21) to obtain a forecast of the total dollar volume for the month (\$2,453,518,968,084). Repeat the method to generate forecasts for subsequent months.

The forecasts for total dollar volume are in column I of Table A. The following is a more formal (mathematical) description of the procedure:

1. Divide each month's total dollar volume (column E) by the number of trading days in that month (column B) to obtain the average daily dollar volume (ADS, column F).
2. For each month t , calculate the change in ADS from the previous month as $\Delta_t = \log(\text{ADS}_t / \text{ADS}_{t-1})$, where $\log(x)$ denotes the natural logarithm of x .
3. Calculate the mean and standard deviation of the series $\{\Delta_1, \Delta_2, \dots, \Delta_{120}\}$. These are given by $\mu = 0.014$ and $\sigma = 0.118$, respectively.
4. Assume that the natural logarithm of ADS follows a random walk, so that Δ_s and Δ_t are statistically independent for any two months s and t .
5. Under the assumption that Δ_t is normally distributed, the expected value of $\text{ADS}_t / \text{ADS}_{t-1}$ is given by $\exp(\mu + \sigma^2/2)$, or on average $\text{ADS}_t = 1.022 \times \text{ADS}_{t-1}$.

² The value 1.022 has been rounded. All computations are done with the unrounded value.

6. For April 2004, this gives a forecast ADS of $1.022 \times \$114,370,494,465 = \$116,834,236,575$.

Multiply this figure by the 21 trading days in April 2004 to obtain a total dollar volume forecast of \$2,453,518,968,084.

7. For May 2004, multiply the April 2004 ADS forecast by 1.022 to obtain a forecast ADS of \$119,351,052,035. Multiply this figure by the 20 trading days in May 2004 to obtain a total dollar volume forecast of \$2,387,021,040,703.

8. Repeat this procedure for subsequent months.

B. Using the forecasts from A to calculate the new fee rate.

1. Use Table B to estimate fees collected for the period 10/1/04 through 10/31/04. The projected aggregate dollar amount of sales for this period is \$2,788,214,479,378. Projected fee collections at the current fee rate of 0.0000234 are \$65,244,219.

2. Estimate the amount of assessments on securities futures products collected during 10/1/04 and 9/30/05 to be \$61,356 by projecting a 2.2% monthly increase from a base of \$3,884 in March 2004.

3. Subtract the amounts \$65,244,219 and \$61,356 from the target offsetting collection amount set by Congress of \$1,220,000,000 leaving \$1,154,694,425 to be collected on dollar volume for the period 11/1/04 through 9/30/05.

4. Use Table B to estimate dollar volume for the period 11/1/04 through 9/30/05. The estimate is \$35,114,229,035,876. Finally, compute the fee rate required to produce the additional \$1,154,694,425 in revenue. This rate is \$1,154,694,425 divided by \$35,114,229,035,876 or .0000328839.

5. Consistent with the system requirements of the exchanges and the NASD, round the result to the seventh decimal point, yielding a rate of .0000329 (or \$32.90 per million).

Table B. Estimation of baseline of the aggregate dollar amount of sales.
(Methodology developed in consultation with the Office of Management and Budget and the Congressional Budget Office.)

Fee rate calculation.

a. Baseline estimate of the aggregate dollar amount of sales, 10/1/04 to 10/31/04 (\$Millions)	2,788,214
b. Baseline estimate of the aggregate dollar amount of sales, 11/1/04 to 9/30/05 (\$Millions)	35,114,229
c. Estimated collections in assessments on securities futures products in FY 2005 (\$Millions)	0.061
d. Implied fee rate (($\$1,220,000,000 - 0.0000234 \cdot a - c$) / b)	\$32.9

Data

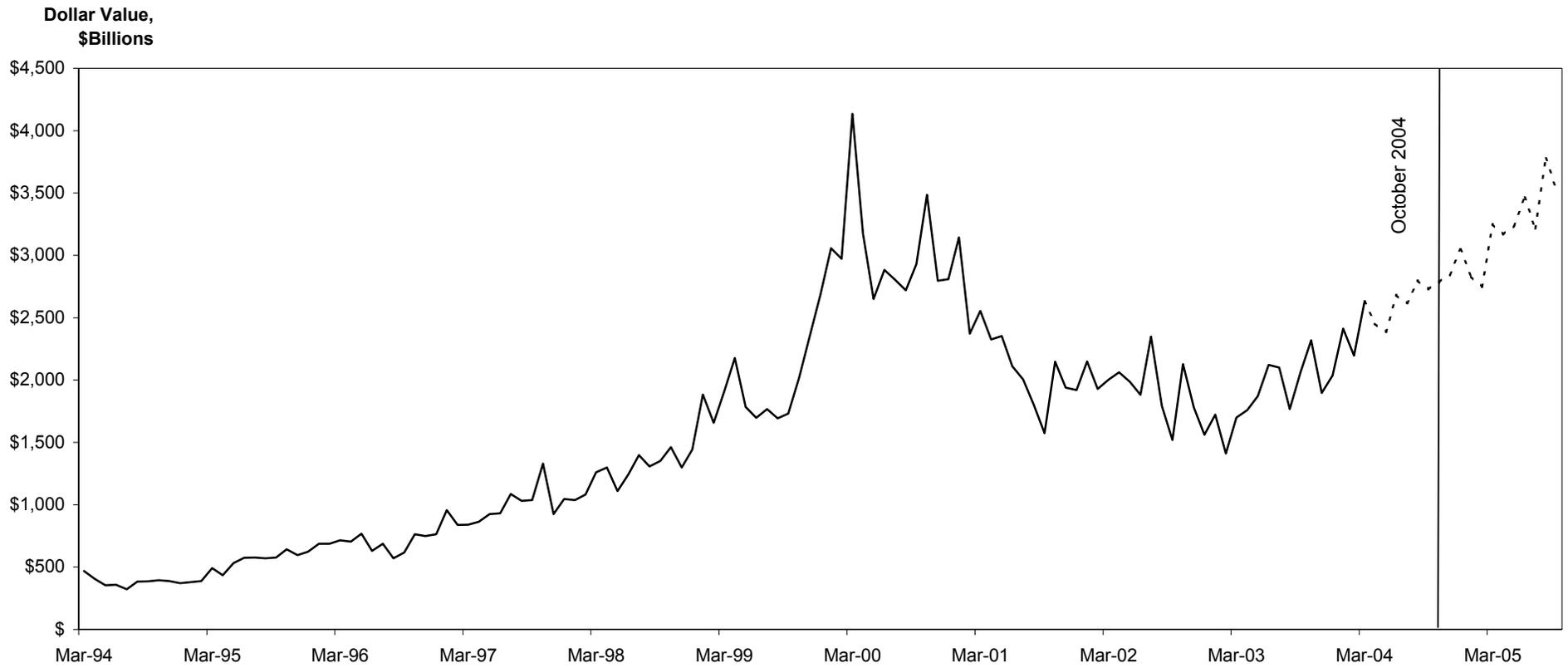
(A) Month	(B) # of Trading Days in Month	(C) Exchange-Listed Dollar Amount of Sales	(D) Nasdaq Dollar Amount of Sales	(E) Aggregate Dollar Amount of Sales	(F) Average Daily Dollar Amount of Sales (ADS)	(G) Change in LN of ADS	(H) Forecast ADS	(I) Forecast Aggregate Dollar Amount of Sales
Mar-94	23	316,713,498,173	151,177,373,000	467,890,871,173	20,343,081,355	-		
Apr-94	19	289,365,151,226	114,834,515,000	404,199,666,226	21,273,666,643	0.045		
May-94	21	241,278,516,490	112,318,747,000	353,597,263,490	16,837,964,928	-0.234		
Jun-94	22	245,067,967,632	112,555,736,000	357,623,703,632	16,255,622,892	-0.035		
Jul-94	20	221,511,138,952	100,563,525,000	322,074,663,952	16,103,733,198	-0.009		
Aug-94	23	255,511,795,450	127,675,353,000	383,187,148,450	16,660,310,802	0.034		
Sep-94	21	273,589,300,476	111,984,539,000	385,573,839,476	18,360,659,023	0.097		
Oct-94	21	266,363,537,805	129,089,800,000	395,453,337,805	18,831,111,324	0.025		
Nov-94	21	267,314,618,799	121,827,668,000	389,142,286,799	18,530,585,086	-0.016		
Dec-94	21	265,184,891,948	106,839,641,000	372,024,532,948	17,715,453,950	-0.045		
Jan-95	21	253,958,524,771	125,092,685,000	379,051,209,771	18,050,057,608	0.019		
Feb-95	19	263,486,075,035	125,574,811,000	389,060,886,035	20,476,888,739	0.126		
Mar-95	23	330,806,034,718	161,066,575,000	491,872,609,718	21,385,765,640	0.043		
Apr-95	19	285,586,213,818	149,741,420,000	435,327,633,818	22,911,980,727	0.069		
May-95	22	340,254,177,379	191,600,883,000	531,855,060,379	24,175,230,017	0.054		
Jun-95	22	376,703,055,609	197,629,158,000	574,332,213,609	26,106,009,710	0.077		
Jul-95	20	346,809,496,831	229,239,839,000	576,049,335,831	28,802,466,792	0.098		
Aug-95	23	327,435,391,060	243,203,335,000	570,638,726,060	24,810,379,394	-0.149		
Sep-95	20	352,176,019,676	225,957,920,000	578,133,939,676	28,906,696,984	0.153		
Oct-95	22	386,892,948,035	255,297,230,000	642,190,178,035	29,190,462,638	0.010		
Nov-95	21	340,868,134,565	255,556,416,000	596,424,550,565	28,401,169,075	-0.027		
Dec-95	20	386,356,222,037	238,254,219,000	624,610,441,037	31,230,522,052	0.095		
Jan-96	22	412,342,988,854	275,256,103,000	687,599,091,854	31,254,504,175	0.001		
Feb-96	20	432,110,721,273	255,121,750,000	687,232,471,273	34,361,623,564	0.095		
Mar-96	21	462,522,216,093	252,313,904,000	714,836,120,093	34,039,815,243	-0.009		
Apr-96	21	419,529,647,022	284,880,671,000	704,410,318,022	33,543,348,477	-0.015		
May-96	22	444,864,509,489	323,514,998,000	768,379,507,489	34,926,341,250	0.040		
Jun-96	20	364,047,300,223	267,051,480,000	631,098,780,223	31,554,939,011	-0.102		
Jul-96	22	405,998,331,384	282,430,397,000	688,428,728,384	31,292,214,927	-0.008		
Aug-96	22	347,207,351,036	222,902,421,000	570,109,772,036	25,914,080,547	-0.189		

Sep-96	20	361,752,600,688	255,491,281,000	617,243,881,688	30,862,194,084	0.175		
Oct-96	23	450,138,412,454	314,131,029,000	764,269,441,454	33,229,106,150	0.074		
Nov-96	20	468,499,807,419	279,994,893,000	748,494,700,419	37,424,735,021	0.119		
Dec-96	21	475,791,378,753	288,688,118,000	764,479,496,753	36,403,785,560	-0.028		
Jan-97	22	578,613,348,586	378,819,289,000	957,432,637,586	43,519,665,345	0.179		
Feb-97	19	500,101,991,446	337,072,192,000	837,174,183,446	44,061,799,129	0.012		
Mar-97	20	526,670,517,788	312,522,211,000	839,192,728,788	41,959,636,439	-0.049		
Apr-97	22	541,016,966,315	321,782,247,000	862,799,213,315	39,218,146,060	-0.068		
May-97	21	560,712,670,647	365,021,182,000	925,733,852,647	44,082,564,412	0.117		
Jun-97	21	590,497,004,859	339,912,081,000	930,409,085,859	44,305,194,565	0.005		
Jul-97	22	665,142,486,898	420,540,220,000	1,085,682,706,898	49,349,213,950	0.108		
Aug-97	21	646,260,997,751	385,083,141,000	1,031,344,138,751	49,111,625,655	-0.005		
Sep-97	21	636,729,800,602	399,730,444,000	1,036,460,244,602	49,355,249,743	0.005		
Oct-97	23	795,309,593,718	534,343,839,000	1,329,653,432,718	57,811,018,814	0.158		
Nov-97	19	614,656,941,587	311,360,937,000	926,017,878,587	48,737,783,084	-0.171		
Dec-97	22	670,717,275,199	375,503,531,000	1,046,220,806,199	47,555,491,191	-0.025		
Jan-98	20	662,635,021,902	375,290,271,000	1,037,925,292,902	51,896,264,645	0.087		
Feb-98	19	672,828,859,396	408,876,474,000	1,081,705,333,396	56,931,859,652	0.093		
Mar-98	22	795,132,023,467	464,862,662,000	1,259,994,685,467	57,272,485,703	0.006		
Apr-98	21	819,690,018,253	478,804,341,000	1,298,494,359,253	61,833,064,726	0.077		
May-98	20	717,931,027,995	392,290,631,000	1,110,221,658,995	55,511,082,950	-0.108		
Jun-98	22	778,892,937,913	464,886,854,000	1,243,779,791,913	56,535,445,087	0.018		
Jul-98	22	837,582,352,748	561,429,081,000	1,399,011,433,748	63,591,428,807	0.118		
Aug-98	21	812,804,954,442	494,696,509,000	1,307,501,463,442	62,261,974,450	-0.021		
Sep-98	21	899,449,779,083	452,978,456,000	1,352,428,235,083	64,401,344,528	0.034		
Oct-98	22	941,206,761,926	519,628,635,672	1,460,835,397,598	66,401,608,982	0.031		
Nov-98	20	763,668,070,478	534,735,697,587	1,298,403,768,065	64,920,188,403	-0.023		
Dec-98	22	832,619,360,060	610,078,427,246	1,442,697,787,306	65,577,172,150	0.010		
Jan-99	19	1,002,792,782,534	881,762,273,376	1,884,555,055,910	99,187,108,206	0.414		
Feb-99	19	884,236,683,650	771,821,519,115	1,656,058,202,765	87,160,958,040	-0.129		
Mar-99	23	1,063,644,002,718	845,323,661,356	1,908,967,664,074	82,998,594,090	-0.049		
Apr-99	21	1,202,755,130,954	974,846,639,668	2,177,601,770,622	103,695,322,411	0.223		
May-99	20	1,055,752,423,736	728,648,483,251	1,784,400,906,987	89,220,045,349	-0.150		
Jun-99	22	968,672,852,262	728,666,375,241	1,697,339,227,503	77,151,783,068	-0.145		
Jul-99	21	971,377,415,431	795,657,683,556	1,767,035,098,986	84,144,528,523	0.087		
Aug-99	22	910,143,257,265	782,763,893,461	1,692,907,150,726	76,950,325,033	-0.089		
Sep-99	21	887,751,464,814	842,754,416,364	1,730,505,881,178	82,405,041,961	0.068		
Oct-99	21	1,078,637,908,317	938,836,857,225	2,017,474,765,542	96,070,226,931	0.153		
Nov-99	21	1,129,374,113,398	1,218,999,895,936	2,348,374,009,334	111,827,333,778	0.152		
Dec-99	22	1,214,245,992,515	1,472,542,539,476	2,686,788,531,991	122,126,751,454	0.088		

Jan-00	20	1,298,320,930,164	1,759,510,466,949	3,057,831,397,113	152,891,569,856	0.225		
Feb-00	20	1,242,939,925,885	1,730,179,962,177	2,973,119,888,063	148,655,994,403	-0.028		
Mar-00	23	1,674,957,313,287	2,460,195,052,947	4,135,152,366,234	179,789,233,315	0.190		
Apr-00	19	1,435,035,900,103	1,739,658,625,584	3,174,694,525,687	167,089,185,562	-0.073		
May-00	22	1,275,173,133,440	1,374,100,073,878	2,649,273,207,318	120,421,509,424	-0.328		
Jun-00	22	1,288,821,230,447	1,594,692,767,334	2,883,513,997,781	131,068,818,081	0.085		
Jul-00	20	1,210,411,492,966	1,594,341,902,395	2,804,753,395,361	140,237,669,768	0.068		
Aug-00	23	1,212,084,264,128	1,508,704,131,703	2,720,788,395,832	118,295,147,645	-0.170		
Sep-00	20	1,266,743,469,149	1,663,445,339,863	2,930,188,809,012	146,509,440,451	0.214		
Oct-00	22	1,520,695,416,929	1,965,230,890,799	3,485,926,307,727	158,451,195,806	0.078		
Nov-00	21	1,293,925,005,931	1,501,853,870,956	2,795,778,876,887	133,132,327,471	-0.174		
Dec-00	20	1,372,200,223,377	1,437,717,126,473	2,809,917,349,851	140,495,867,493	0.054		
Jan-01	21	1,553,316,868,836	1,590,184,256,408	3,143,501,125,244	149,690,529,774	0.063		
Feb-01	19	1,229,720,673,393	1,142,699,849,893	2,372,420,523,286	124,864,238,068	-0.181		
Mar-01	22	1,459,253,562,636	1,095,165,522,477	2,554,419,085,113	116,109,958,414	-0.073		
Apr-01	20	1,320,145,219,933	1,004,204,287,812	2,324,349,507,745	116,217,475,387	0.001		
May-01	22	1,321,526,084,016	1,031,653,304,287	2,353,179,388,303	106,962,699,468	-0.083		
Jun-01	21	1,247,283,258,199	864,638,855,037	2,111,922,113,236	100,567,719,678	-0.062		
Jul-01	21	1,242,431,937,109	761,952,097,446	2,004,384,034,554	95,446,858,788	-0.052		
Aug-01	23	1,126,055,224,969	677,510,112,826	1,803,565,337,795	78,415,884,252	-0.197		
Sep-01	15	1,047,626,761,645	525,858,184,738	1,573,484,946,383	104,898,996,426	0.291		
Oct-01	23	1,349,118,916,636	798,119,956,408	2,147,238,873,044	93,358,211,871	-0.117		
Nov-01	21	1,172,054,711,429	767,372,506,089	1,939,427,217,518	92,353,677,025	-0.011		
Dec-01	20	1,163,934,125,870	757,164,612,243	1,921,098,738,113	96,054,936,906	0.039		
Jan-02	21	1,295,560,129,211	853,683,183,221	2,149,243,312,432	102,344,919,640	0.063		
Feb-02	19	1,265,596,423,330	663,234,172,254	1,928,830,595,585	101,517,399,768	-0.008		
Mar-02	20	1,391,686,235,846	610,530,138,668	2,002,216,374,514	100,110,818,726	-0.014		
Apr-02	22	1,425,803,762,869	636,298,103,636	2,062,101,866,506	93,731,903,023	-0.066		
May-02	22	1,389,712,534,140	596,147,222,417	1,985,859,756,557	90,266,352,571	-0.038		
Jun-02	20	1,346,347,183,249	535,838,197,360	1,882,185,380,609	94,109,269,030	0.042		
Jul-02	22	1,785,869,953,351	563,694,536,838	2,349,564,490,189	106,798,385,918	0.126		
Aug-02	22	1,366,263,208,686	427,166,695,393	1,793,429,904,079	81,519,541,095	-0.270		
Sep-02	20	1,142,597,400,966	376,346,966,238	1,518,944,367,204	75,947,218,360	-0.071		
Oct-02	23	1,598,092,211,882	529,782,736,090	2,127,874,947,972	92,516,302,086	0.197		
Nov-02	20	1,282,210,858,888	498,605,599,233	1,780,816,458,122	89,040,822,906	-0.038		
Dec-02	21	1,145,194,968,127	415,897,247,519	1,561,092,215,646	74,337,724,555	-0.180		
Jan-03	21	1,248,793,946,741	474,904,883,673	1,723,698,830,414	82,080,896,686	0.099		
Feb-03	19	1,070,048,068,849	341,674,336,507	1,411,722,405,357	74,301,179,229	-0.100		
Mar-03	21	1,293,340,642,585	406,242,999,932	1,699,583,642,517	80,932,554,406	0.085		
Apr-03	21	1,310,080,563,238	449,316,319,231	1,759,396,882,469	83,780,803,927	0.035		

May-03	21	1,451,830,957,154	419,562,973,291	1,871,393,930,445	89,113,996,688	0.062		
Jun-03	21	1,656,129,355,959	466,098,458,761	2,122,227,814,720	101,058,467,368	0.126		
Jul-03	22	1,622,749,852,799	478,067,675,641	2,100,817,528,440	95,491,705,838	-0.057		
Aug-03	21	1,407,923,702,993	358,605,215,318	1,766,528,918,312	84,120,424,681	-0.127		
Sep-03	21	1,615,383,245,929	448,201,176,011	2,063,584,421,939	98,265,924,854	0.155		
Oct-03	23	1,828,085,746,139	490,992,492,650	2,319,078,238,789	100,829,488,643	0.026		
Nov-03	19	1,538,248,661,152	358,360,077,946	1,896,608,739,098	99,821,512,584	-0.010		
Dec-03	22	1,692,590,388,413	344,449,615,057	2,037,040,003,469	92,592,727,430	-0.075		
Jan-04	20	1,929,842,015,739	482,284,281,048	2,412,126,296,786	120,606,314,839	0.264		
Feb-04	19	1,840,581,043,697	355,213,320,825	2,195,794,364,522	115,568,124,449	-0.043		
Mar-04	23	2,060,077,787,798	570,443,584,895	2,630,521,372,693	114,370,494,465	-0.010		
Apr-04	21						116,834,236,575	2,453,518,968,084
May-04	20						119,351,052,035	2,387,021,040,703
Jun-04	22						121,922,084,138	2,682,285,851,026
Jul-04	21						124,548,500,805	2,615,518,516,899
Aug-04	22						127,231,495,118	2,799,092,892,592
Sep-04	21						129,972,285,859	2,729,418,003,041
Oct-04	21						132,772,118,066	2,788,214,479,378
Nov-04	21						135,632,263,595	2,848,277,535,485
Dec-04	22						138,554,021,701	3,048,188,477,426
Jan-05	20						141,538,719,629	2,830,774,392,582
Feb-05	19						144,587,713,213	2,747,166,551,049
Mar-05	22						147,702,387,495	3,249,452,524,889
Apr-05	21						150,884,157,353	3,168,567,304,405
May-05	21						154,134,468,143	3,236,823,831,007
Jun-05	22						157,454,796,359	3,464,005,519,902
Jul-05	20						160,846,650,299	3,216,933,005,988
Aug-05	23						164,311,570,754	3,779,166,127,344
Sep-05	21						167,851,131,705	3,524,873,765,799

Figure B.
 Aggregate Dollar Amount of Sales Subject to Exchange Act Sections 31(b) and 31(c)¹
 Methodology Developed in Consultation With OMB and CBO
 (Dashed Line Indicates Forecast Values)



¹Forecasted line is not smooth because the number of trading days varies by month.