#### SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-85287 / March 11, 2019]

Order Making Fiscal Year 2019 Annual Adjustments to Transaction Fee Rates

## I. Background

Section 31 of the Securities Exchange Act of 1934 ("Exchange Act") requires each national securities exchange and national securities association to pay transaction fees to the Commission. Specifically, Section 31(b) requires each national securities exchange to pay to the Commission fees based on the aggregate dollar amount of sales of certain securities ("covered sales") transacted on the exchange. Section 31(c) requires each national securities association to pay to the Commission fees based on the aggregate dollar amount of covered sales transacted by or through any member of the association other than on an exchange.

Section 31 of the Exchange Act requires the Commission to annually adjust the fee rates applicable under Sections 31(b) and (c) to a uniform adjusted rate.<sup>4</sup> Specifically, the Commission must adjust the fee rates to a uniform adjusted rate that is reasonably likely to produce aggregate fee collections (including assessments on security futures transactions) equal to the regular appropriation to the Commission for the applicable fiscal year.<sup>5</sup>

<sup>2</sup> 15 U.S.C. 78ee(b).

<sup>&</sup>lt;sup>1</sup> 15 U.S.C. 78ee.

<sup>&</sup>lt;sup>3</sup> 15 U.S.C. 78ee(c).

In some circumstances, the SEC also must make a mid-year adjustment to the fee rates applicable under Sections 31(b) and (c).

<sup>&</sup>lt;sup>5</sup> 15 U.S.C. § 78ee(j)(1) (the Commission must adjust the rates under Sections 31(b) and (c) to a "uniform adjusted rate that, when applied to the baseline estimate of the aggregate dollar amount

The Commission is required to publish notice of the new fee rates under Section 31 not later than 30 days after the date on which an Act making a regular appropriation for the applicable fiscal year is enacted.<sup>6</sup> On February 15, 2019, the President signed into law the Consolidated Appropriations Act, 2019, which includes total appropriations of \$1,712,091,000 to the SEC for fiscal year 2019.

# II. Fiscal Year 2019 Annual Adjustment to the Fee Rate

The new fee rate is determined by (1) subtracting the sum of fees estimated to be collected prior to the effective date of the new fee rate<sup>7</sup> and estimated assessments on security futures transactions to be collected under Section 31(d) of the Exchange Act for all of fiscal year 2019<sup>8</sup> from an amount equal to the regular appropriation to the Commission for fiscal year 2019, and (2) dividing by the estimated aggregate dollar amount of covered sales for the remainder of the fiscal year following the effective date of the new fee rate.<sup>9</sup>

of sales for such fiscal year, is reasonably likely to produce aggregate fee collections under [Section 31] (including assessments collected under [Section 31(d)]) that are equal to the regular appropriation to the Commission by Congress for such fiscal year.").

<sup>&</sup>lt;sup>6</sup> 15 U.S.C. § 78ee(g).

The sum of fees to be collected prior to the effective date of the new fee rate is determined by applying the current fee rate to the dollar amount of covered sales prior to the effective date of the new fee rate. The exchanges and FINRA have provided data on the dollar amount of covered sales through January, 2019. To calculate the dollar amount of covered sales from February, 2019 to the effective date of the new fee rate, the Commission is using the methodology described in the Appendix A of this order.

The Commission is using the same methodology it has used previously to estimate assessments on security futures transactions to be collected in fiscal year 2019. An explanation of the methodology appears in Appendix A.

To estimate the aggregate dollar amount of covered sales for the remainder of fiscal year 2019 following the effective date of the new fee rate, the Commission is using the methodology described in Appendix A of this order.

As noted above, the Consolidated Appropriations Act, 2019, includes total appropriations of \$1,712,091,000 to the Commission for fiscal year 2019. The Commission estimates that it will collect \$740,970,262 in fees for the period prior to the effective date of the new fee rate and \$23,127 in assessments on round turn transactions in security futures products during all of fiscal year 2019. Using the methodology described in Appendix A, the Commission estimates that the aggregate dollar amount of covered sales for the remainder of fiscal year 2019 to be \$46,958,135,950,927.

The uniform adjusted rate is computed by dividing the residual fees to be collected of \$971,097,612 by the estimated aggregate dollar amount of covered sales for the remainder of fiscal year 2019 of \$46,958,135,950,927; this results in a uniform adjusted rate for fiscal year 2019 of \$20.70 per million.<sup>11</sup>

## III. Effective Date of the Uniform Adjusted Rate

Under Section 31(j)(4)(A) of the Exchange Act, the fiscal year 2019 annual adjustments to the fee rates applicable under Sections 31(b) and (c) of the Exchange Act shall take effect on the later of October 1, 2018, or 60 days after the date on which a regular appropriation to the Commission for fiscal year 2019 is enacted. The regular appropriation to the Commission for fiscal year 2019 was enacted on February 15, 2019, and

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The Consolidated Appropriations Act, 2019 includes an appropriation of \$1,674,902,000 for necessary expenses for the Commission and an appropriation of \$37,189,000 for costs associated with relocation under a replacement lease for the Commission's New York regional office facilities. The act provides that "for purposes of calculating the fee rate under section 31(j) of the [Exchange Act] for fiscal year 2019, all amounts appropriated [to the Commission in the act] shall be deemed to be the regular appropriation to the Commission for fiscal year 2019."

Appendix A shows the process of calculating the fiscal year 2019 annual adjustment and includes the data used by the Commission in making this adjustment.

<sup>15</sup> U.S.C. § 78ee(j)(4)(A).

accordingly, the new fee rates applicable under Sections 31(b) and (c) of the Exchange Act will take effect on April 16, 2019.

# IV. Conclusion

Accordingly, pursuant to Section 31 of the Exchange Act,

IT IS HEREBY ORDERED that the fee rates applicable under Sections 31(b) and (c) of the Exchange Act shall be \$20.70 per \$1,000,000 effective on April 16, 2019.

By the Commission.

Eduardo A. Aleman,

Deputy Secretary.

#### **APPENDIX A**

This appendix provides the methodology for determining the annual adjustment to the fee rates applicable under Sections 31(b) and (c) of the Exchange Act for fiscal year 2019. Section 31 of the Exchange Act requires the fee rates to be adjusted so that it is reasonably likely that the Commission will collect aggregate fees equal to its regular appropriation for fiscal year 2019.

To make the adjustment, the Commission must project the aggregate dollar amount of covered sales of securities on the securities exchanges and certain overthe-counter ("OTC") markets over the course of the year. The fee rate equals the ratio of the Commission's regular appropriation for fiscal year 2019 (less the sum of fees to be collected during fiscal year 2019 prior to the effective date of the new fee rate and aggregate assessments on security futures transactions during all of fiscal year 2019) to the estimated aggregate dollar amount of covered sales for the remainder of the fiscal year following the effective date of the new fee rate.

For 2019, the Commission has estimated the aggregate dollar amount of covered sales by projecting forward the trend established in the previous decade. More specifically, the dollar amount of covered sales was forecasted for months subsequent to January 2019, the last month for which the Commission has data on the dollar volume of covered sales.<sup>13</sup>

The following sections describe this process in detail.

months.

To determine the availability of data, the Commission compares the date of the appropriation with the date the transaction data are due from the exchanges (10 business days after the end of the month). If the business day following the date of the appropriation is equal to or subsequent to the date the data are due from the exchanges, the Commission uses these data. The appropriation was signed on February 15, 2019. The first business day after this date was February 19, 2019. Data for January 2019 were due from the exchanges on February 14, 2019. As a result, the Commission used January 2019 and earlier data to forecast volume for February 2019 and later

# A. Baseline estimate of the aggregate dollar amount of covered sales for fiscal year 2019

First, calculate the average daily dollar amount of covered sales ("ADS") for each month in the sample (December 2008 – January 2019). The monthly total dollar amount of covered sales (exchange plus certain OTC markets) is presented in column C of Table A.

Next, model the monthly change in the natural logarithm of ADS as a first order autoregressive process ("AR(1)"), including monthly indicator variables to control for seasonality.

Use the estimated AR(1) model to forecast the monthly change in the log level of ADS. These percent changes can then be applied to obtain forecasts of the total dollar volume of covered sales. The following is a more formal (mathematical) description of the procedure:

- 1. Begin with the monthly data for total dollar volume of covered sales (column C). The sample spans ten years, from December 2008 January 2019. <sup>14</sup> Divide each month's total dollar volume by the number of trading days in that month (column B) to obtain the average daily dollar volume (ADS, column D).
- 2. For each month t, calculate  $\Delta$  LN ADS (shown in column E) as the log growth rate of ADS, that is, the difference between the natural logarithm of ADS in month t and its value in the prior month.

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<sup>&</sup>lt;sup>14</sup> Because the model uses a one period lag in the *change* in the log level of average daily sales, two additional months of data are added to the table so that the model is estimated with 120 observations.

3. Estimate the AR(1) model

$$y_t = \beta y_{t-1} + \sum_{m=1}^{12} \alpha_m D_t^m + \varepsilon_t$$

with  $D_t^m$  representing monthly indicator variables,  $y_t$  representing the log growth rate in ADS ( $\Delta$  LN ADS), and  $\varepsilon_t$  representing the error term for month t. The model can be estimated using standard commercially available software. The estimated parameter values are  $\hat{\beta} = -0.2692$  and  $\hat{\alpha}_1 - \hat{\alpha}_{12}$  as follows:  $\hat{\alpha}_1 (JAN) = 0.0386$ ,  $\hat{\alpha}_2 (FEB) = 0.0773$ ,  $\hat{\alpha}_3 (MAR) = -0.0251$ ,  $\hat{\alpha}_4 (APR) = -0.0565$ ,  $\hat{\alpha}_5 (MAY) = 0.0279$ ,  $\hat{\alpha}_6 (JUN) = 0.0042$ ,  $\hat{\alpha}_7 (JUL) = -0.0918$ ,  $\hat{\alpha}_8 (AUG) = -0.0039$ ,  $\hat{\alpha}_9 (SEP) = 0.0560$ ,  $\hat{\alpha}_{10} (OCT) = 0.0594$ ,  $\hat{\alpha}_{11} (NOV) = -0.0117$ ,  $\hat{\alpha}_{12} (DEC) = -0.0069$ . The root-mean squared error (RMSE) of the

4. For the first month calculate the forecasted value of the log growth rate of ADS as

$$\hat{y}_{t} = \hat{\beta} y_{t-1} + \sum_{m=1}^{12} \hat{\alpha}_{m} D_{mt}$$

regression is 0.1037.

For the next month use the forecasted value of the log growth rate of the first month to calculate the forecast of the next month. This process iterates until a forecast is generated for all remaining months in the fiscal year. These data appear in column F.

5. Assuming that the regression error in the AR(1) model is normally distributed, the expected percentage change in average daily dollar volume from month t-1 to

- month t is then given by the expression  $\exp\left(\hat{\beta}y_{t-1} + \frac{1}{2}\sigma^2\right) 1$ , where  $\sigma$  denotes the root mean squared error of the regression (RMSE).
- 6. For instance, for February 2019, using the  $\hat{\beta}$  parameter and the  $\hat{\alpha}_2$  parameter (for February) above, and the change in the log-level ADS from January, 2019, we can estimate the change in the log growth in average daily sales as  $\hat{\beta}y_{Jan} + \hat{\alpha}_{Feb} = ((-0.2692 \times -0.2311) + 0.0773) = +0.1395$  This represents the estimated *change* in log average daily dollar volume for February 2019 relative to January 2019. To estimate the percent change in average daily sales from January 2019 to February 2019, use the formula shown in Step 5, above:  $\exp(+0.1395 + \frac{1}{2}0.1037^2) 1 = +0.1559$ . Apply this estimated percent change in ADS to the ADS for January 2019 to estimate the ADS for February 2019 as \$379,079,268,750 × (1 + 0.1559) = \$438,192,488,788. Multiply this by the 19 trading days in February 2019 to obtain a total dollar volume forecast of \$8,325,657,286,963.
- 7. For March 2019, proceed in a similar fashion. Using the estimates for February 2019 along with the  $\hat{\beta}$  parameter and the  $\hat{\alpha}_3$  parameter (for March) to generate a forecast for the one-month change in the log level of average daily sales. Convert the estimated log change in average daily sales to estimated percent change in ADS as in step 6, above to obtain a forecast ADS of \$413,789,951,878. Multiply this figure by the 21 trading days in March 2019 to obtain a total dollar volume forecast of \$8,689,588,989,442.

8. Repeat this procedure for subsequent months.

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

- Use Table A to estimate fees collected for the period October 1, 2018 through April
  15, 2019. The projected aggregate dollar amount of covered sales for this period is
  \$56,997,712,431,458. Actual and projected fee collections at the current fee rate of
  \$13.00 per million are \$740,970,262.
- 2. Estimate the amount of assessments on security futures products collected from October 1, 2018 through September 30, 2019. First, calculate the average and the standard deviation of the change in log average daily sales, in column E, for the 120 months ending January 2019. The average is 0.004038 and the standard deviation is 0.111345. These are used to estimate an average growth rate in ADS using the formula exp (0.004038 + ½ 0.111345²) 1. This results in an average monthly increase of 1.029%. Apply this monthly increase to the last month for which single stock futures' assessments are available, which was \$1,701.13, for January 2019. Estimate all subsequent months in fiscal year 2019 by applying the growth rate to the previously estimated monthly value, and sum the results. This totals \$23,126.73 for the entire fiscal year.
- 3. Subtract the amounts \$740,970,262 and \$23,127 from the target off-setting collection amount set by Congress of \$1,712,091,000, leaving \$971,097,612 to be collected on dollar volume for the period April 16, 2019 through September 30, 2019.
- 4. Use Table A to estimate dollar volume for the period April 16, 2019 through September 30, 2019. The estimate is \$46,958,135,950,927. Finally, compute the fee

rate required to produce the additional \$971,097,612 in revenue. This rate is \$971,097,612 divided by \$46,958,135,950,927 or 0.00002068007.

5. Round the result to the seventh decimal point, yielding a rate of 0.0000207 (or \$20.70 per million).

This table summarizes the estimates of the aggregate dollar amount of covered sales, by time period. The figures in this table can be used to determine the new fee rate.

Table A. Baseline estimate of the aggregate dollar amount of sales.

## Fee rate calculation.

a. Baseline estimate of the aggregate dollar amount of sales, 10/01/2018 to 03/31/2019 (\$Millions)	52,599,495
b. Baseline estimate of the aggregate dollar amount of sales, 04/01/2019 to 04/15/2019 (\$Millions)	4,398,217
c. Baseline estimate of the aggregate dollar amount of sales, 04/16/2019 to 04/30/2019 (\$Millions)	3,998,379
d. Baseline estimate of the aggregate dollar amount of sales, 05/01/2019 to 09/30/2019 (\$Millions)	42,959,756
e. Estimated collections in assessments on security futures products in fiscal year 2019 (\$Millions)	0.023
f. Implied fee rate ((\$1,712,091,000 - \$13.00*(a+b) - e) / (c+d)	\$20.70

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	Δ LN ADS	Forecast Δ LN ADS	Forecast Average Daily Dollar amount of Sales	Forecast Total Dollar Amount of Sales
Dec-08	22	5,176,041,317,640	235,274,605,347	#N/A			
Jan-09	20	4,670,249,433,806	233,512,471,690	-0.00752			
Feb-09	19	4,771,470,184,048	251,130,009,687	0.07274			
Mar-09	22	5,885,594,284,780	267,527,012,945	0.06325			
Apr-09	21	5,123,665,205,517	243,984,057,406	-0.09212			
May-09	20	5,086,717,129,965	254,335,856,498	0.04155			
Jun-09	22	5,271,742,782,609	239,624,671,937	-0.05958			
Jul-09	22	4,659,599,245,583	211,799,965,708	-0.12343			
Aug-09	21	4,582,102,295,783	218,195,347,418	0.02975			
Sep-09	21	4,929,155,364,888	234,721,684,042	0.07301			
Oct-09	22	5,410,025,301,030	245,910,240,956	0.04657			
Nov-09	20	4,770,928,103,032	238,546,405,152	-0.03040			
Dec-09	22	4,688,555,303,171	213,116,150,144	-0.11273			
Jan-10	19	4,661,793,708,648	245,357,563,613	0.14088			
Feb-10	19	4,969,848,578,023	261,570,977,791	0.06399			
Mar-10	23	5,563,529,823,621	241,892,601,027	-0.07821			
Apr-10	21	5,546,445,874,917	264,116,470,234	0.08790			
May-10	20	7,260,430,376,294	363,021,518,815	0.31807			
Jun-10	22	6,124,776,349,285	278,398,924,967	-0.26541			
Jul-10	21	5,058,242,097,334	240,868,671,302	-0.14480			

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	Δ LN ADS	Forecast \[ \Delta LN \]  ADS	Forecast Average Daily Dollar amount of Sales	Forecast Total Dollar Amount of Sales
Aug-10	22	4,765,828,263,463	216,628,557,430	-0.10607			
Sep-10	21	4,640,722,344,586	220,986,778,314	0.01992			
Oct-10	21	5,138,411,712,272	244,686,272,013	0.10187			
Nov-10	21	5,279,700,881,901	251,414,327,710	0.02713			
Dec-10	22	4,998,574,681,208	227,207,940,055	-0.10124			
Jan-11	20	5,043,391,121,345	252,169,556,067	0.10424			
Feb-11	19	5,114,631,590,581	269,191,136,346	0.06532			
Mar-11	23	6,499,355,385,307	282,580,668,926	0.04854			
Apr-11	20	4,975,954,868,765	248,797,743,438	-0.12732			
May-11	21	5,717,905,621,053	272,281,220,050	0.09020			
Jun-11	22	5,820,079,494,414	264,549,067,928	-0.02881			
Jul-11	20	5,189,681,899,635	259,484,094,982	-0.01933			
Aug-11	23	8,720,566,877,109	379,155,081,613	0.37925			
Sep-11	21	6,343,578,147,811	302,075,149,896	-0.22727			
Oct-11	21	6,163,272,963,688	293,489,188,747	-0.02884			
Nov-11	21	5,493,906,473,584	261,614,593,980	-0.11497			
Dec-11	21	5,017,867,255,600	238,946,059,790	-0.09063			
Jan-12	20	4,726,522,206,487	236,326,110,324	-0.01103			
Feb-12	20	5,011,862,514,132	250,593,125,707	0.05862			
Mar-12	22	5,638,847,967,025	256,311,271,228	0.02256			
Apr-12	20	5,084,239,396,560	254,211,969,828	-0.00822			
May-12	22	5,611,638,053,374	255,074,456,972	0.00339			
Jun-12	21	5,121,896,896,362	243,899,852,208	-0.04480			
Jul-12	21	4,567,519,314,374	217,500,919,732	-0.11455			
Aug-12	23	4,621,597,884,730	200,939,038,467	-0.07920			
Sep-12	19	4,598,499,962,682	242,026,313,825	0.18604			
Oct-12	21	5,095,175,588,310	242,627,408,967	0.00248			
Nov-12	21	4,547,882,974,292	216,565,855,919	-0.11363			
Dec-12	20	4,744,922,754,360	237,246,137,718	0.09120			
Jan-13	21	5,079,603,817,496	241,885,896,071	0.01937			
Feb-13	19	4,800,663,527,089	252,666,501,426	0.04360			
Mar-13	20	4,917,701,839,870	245,885,091,993	-0.02721			
Apr-13	22	5,451,358,637,079	247,789,028,958	0.00771			
May-13	22	5,681,788,831,869	258,263,128,721	0.04140			
Jun-13	20	5,623,545,462,226	281,177,273,111	0.08501			
Jul-13	22	5,083,861,509,754	231,084,614,080	-0.19620			
Aug-13	22	4,925,611,193,095	223,891,417,868	-0.03162			
Sep-13	20	4,959,197,626,713	247,959,881,336	0.10211			
Oct-13	23	5,928,804,028,970	257,774,088,216	0.03882			

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	Δ LN ADS	Forecast \[ \Delta \text{LN} \]  ADS	Forecast Average Daily Dollar amount of Sales	Forecast Total Dollar Amount of Sales
Nov-13	20	5,182,024,612,049	259,101,230,602	0.00514			
Dec-13	21	5,265,282,994,173	250,727,761,627	-0.03285			
Jan-14	21	5,808,700,114,288	276,604,767,347	0.09822			
Feb-14	19	6,018,926,931,054	316,785,627,950	0.13564			
Mar-14	21	6,068,617,342,988	288,981,778,238	-0.09186			
Apr-14	21	6,013,948,953,528	286,378,521,597	-0.00905			
May-14	21	5,265,594,447,318	250,742,592,729	-0.13289			
Jun-14	21	5,159,506,989,669	245,690,809,032	-0.02035			
Jul-14	22	5,364,099,567,460	243,822,707,612	-0.00763			
Aug-14	21	5,075,332,147,677	241,682,483,223	-0.00882			
Sep-14	21	5,507,943,363,243	262,283,017,297	0.08180			
Oct-14	23	7,796,638,035,879	338,984,262,430	0.25653			
Nov-14	19	5,340,847,027,697	281,097,211,984	-0.18725			
Dec-14	22	6,559,110,068,128	298,141,366,733	0.05887			
Jan-15	20	6,185,619,541,044	309,280,977,052	0.03668			
Feb-15	19	5,723,523,235,641	301,238,065,034	-0.02635			
Mar-15	22	6,395,046,297,249	290,683,922,602	-0.03566			
Apr-15	21	5,625,548,298,004	267,883,252,286	-0.08169			
May-15	20	5,521,351,972,386	276,067,598,619	0.03009			
Jun-15	22	6,005,521,460,806	272,978,248,218	-0.01125			
Jul-15	22	6,493,670,315,390	295,166,832,518	0.07815			
Aug-15	21	6,963,901,249,270	331,614,345,203	0.11643			
Sep-15	21	6,434,496,770,897	306,404,608,138	-0.07907			
Oct-15	22	6,592,594,708,082	299,663,395,822	-0.02225			
Nov-15	20	5,822,824,015,945	291,141,200,797	-0.02885			
Dec-15	22	6,384,337,478,801	290,197,158,127	-0.00325			
Jan-16	19	6,696,059,796,055	352,424,199,792	0.19428			
Feb-16	20	6,659,878,908,747	332,993,945,437	-0.05671			
Mar-16	22	6,161,943,754,542	280,088,352,479	-0.17302			
Apr-16	21	5,541,076,988,322	263,860,808,968	-0.05968			
May-16	21	5,693,520,415,112	271,120,019,767	0.02714			
Jun-16	22	6,317,212,852,759	287,146,038,762	0.05743			
Jul-16	20	5,331,797,261,269	266,589,863,063	-0.07428			
Aug-16	23	5,635,976,607,786	245,042,461,208	-0.08428			
Sep-16	21	5,942,072,286,976	282,955,823,189	0.14386			
Oct-16	21	5,460,906,573,682	260,043,170,175	-0.08444			
Nov-16	21	6,845,287,809,886	325,966,086,185	0.22595			
Dec-16	21	6,208,579,880,985	295,646,660,999	-0.09763			
Jan-17	20	5,598,200,907,603	279,910,045,380	-0.05470			

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	Δ LN ADS	Forecast Δ LN ADS	Forecast Average Daily Dollar amount of Sales	Forecast Total Dollar Amount of Sales
Feb-17	19	5,443,426,609,533	286,496,137,344	0.02326			
Mar-17	23	6,661,861,914,530	289,646,170,197	0.01094			
Apr-17	19	5,116,714,033,499	269,300,738,605	-0.07283			
May-17	22	6,305,822,460,672	286,628,293,667	0.06236			
Jun-17	22	6,854,993,097,601	311,590,595,346	0.08350			
Jul-17	20	5,394,333,070,522	269,716,653,526	-0.14432			
Aug-17	23	6,206,204,906,864	269,834,995,951	0.00044			
Sep-17	20	5,939,886,169,525	296,994,308,476	0.09590			
Oct-17	22	6,134,529,538,894	278,842,251,768	-0.06307			
Nov-17	21	6,289,748,560,897	299,511,836,233	0.07151			
Dec-17	20	6,672,181,323,001	333,609,066,150	0.10782			
Jan-18	21	7,672,288,677,308	365,347,079,872	0.09088			
Feb-18	19	8,725,420,462,639	459,232,655,928	0.22871			
Mar-18	21	8,264,755,011,030	393,559,762,430	-0.15432			
Apr-18	21	7,490,308,402,446	356,681,352,497	-0.09839			
May-18	22	7,242,077,467,179	329,185,339,417	-0.08022			
Jun-18	21	7,936,783,802,579	377,942,085,837	0.13812			
Jul-18	21	6,807,593,326,456	324,171,110,784	-0.15347			
Aug-18	23	7,363,115,444,274	320,135,454,099	-0.01253			
Sep-18	19	6,781,988,459,996	356,946,761,052	0.10884			
Oct-18	23	10,133,514,480,998	440,587,586,130	0.21052			
Nov-18	21	8,414,847,862,204	400,707,041,057	-0.09488			
Dec-18	19	9,075,221,733,736	477,643,249,144	0.17563			
Jan-19	21	7,960,664,643,749	379,079,268,750	-0.23112			
Feb-19	19				0.1395	438,192,488,788	8,325,657,286,963
Mar-19	21				-0.0627	413,789,951,878	8,689,588,989,442
Apr-19	21				-0.0397	399,837,948,579	8,396,596,920,153
May-19	22				0.0386	417,801,508,030	9,191,633,176,654
Jun-19	20				-0.0062	417,455,061,409	8,349,101,228,188
Jul-19	22				-0.0901	383,542,454,021	8,437,933,988,469
Aug-19	22				0.0204	393,541,847,373	8,657,920,642,210
Sep-19	20				0.0505	416,158,371,481	8,323,167,429,618

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

Dollar Value, \$Billions

