## SECURITIES AND EXCHANGE COMMISSION

[Release Nos. 33-9447; 34-70298/ August 30, 2013]

## Order Making Fiscal Year 2014 Annual Adjustments to Registration Fee Rates

## I. Background

The Commission collects fees under various provisions of the securities laws. Section 6(b) of the Securities Act of 1933 ("Securities Act") requires the Commission to collect fees from issuers on the registration of securities. ${ }^{1}$ Section 13(e) of the Securities Exchange Act of 1934 ("Exchange Act") requires the Commission to collect fees on specified repurchases of securities. ${ }^{2}$ Section $14(\mathrm{~g})$ of the Exchange Act requires the Commission to collect fees on proxy solicitations and statements in corporate control transactions. ${ }^{3}$

The Investor and Capital Markets Fee Relief Act of 2002 ("Fee Relief Act") ${ }^{4}$ required the Commission to make annual adjustments to the fee rates applicable under these sections for each of the fiscal years 2003 through 2011 in an attempt to generate collections equal to yearly targets specified in the statute. ${ }^{5}$ Under the Fee Relief Act, each year's fee rate was announced on the preceding April 30, and took effect five days after the date of enactment of the Commission's regular appropriation.

```
1 15 U.S.C. 77f(b).
2 15 U.S.C. 78m(e).
3 15 U.S.C. 78n(g).
4 \quad \text { Public Law 107-123, } 1 1 5 \text { Stat. } 2 3 9 0 \text { (2002).}
5 See 15 U.S.C. 77f(b)(5), 77f(b)(6), 78m(e)(5), 78m(e)(6), 78n(g)(5) and 78n(g)(6).
```

The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act") ${ }^{6}$ changed many of the provisions related to these fees. The Dodd-Frank Act created new annual collection targets for FY 2012 and thereafter. It also changed the date by which the Commission must announce a new fiscal year's fee rate (August 31) and the date on which the new rate takes effect (October 1).

## II. Fiscal Year 2014 Annual Adjustment to the Fee Rate

Section 6(b)(2) of the Securities Act, as amended by the Dodd-Frank Act, requires the Commission to make an annual adjustment to the fee rate applicable under Section 6(b). ${ }^{7}$ The annual adjustment to the fee rate under Section 6(b) of the Securities Act also sets the annual adjustment to the fee rates under Sections 13(e) and 14(g) of the

## Exchange Act. ${ }^{8}$

Section 6(b)(2) sets forth the method for determining the annual adjustment to the fee rate under Section 6(b) for fiscal year 2014. Specifically, the Commission must adjust the fee rate under Section 6(b) to a "rate that, when applied to the baseline estimate of the aggregate maximum offering prices for [fiscal year 2014], is reasonably likely to produce aggregate fee collections under [Section 6(b)] that are equal to the target fee collection amount for [fiscal year 2014]." That is, the adjusted rate is determined by dividing the "target fee collection amount" for fiscal year 2014 by the "baseline estimate of the aggregate maximum offering prices" for fiscal year 2014.
$6 \quad$ Public Law 111-203, 124 Stat. 1376 (2010).
$7 \quad 15$ U.S.C. $77 \mathrm{f}(\mathrm{b})(2)$. The annual adjustments are designed to adjust the fee rate in a given fiscal year so that, when applied to the aggregate maximum offering price at which securities are proposed to be offered for the fiscal year, it is reasonably likely to produce total fee collections under Section 6(b) equal to the "target fee collection amount" specified in Section 6(b)(6)(A) for that fiscal year.

8
15 U.S.C. $78 \mathrm{~m}(\mathrm{e})(4)$ and 15 U.S.C. $78 \mathrm{n}(\mathrm{g})(4)$.

Section 6(b)(6)(A) specifies that the "target fee collection amount" for fiscal year 2014 is $\$ 485,000,000$. Section 6(b)(6)(B) defines the "baseline estimate of the aggregate maximum offering price" for fiscal year 2014 as "the baseline estimate of the aggregate maximum offering price at which securities are proposed to be offered pursuant to registration statements filed with the Commission during [fiscal year 2014] as determined by the Commission, after consultation with the Congressional Budget Office and the

## Office of Management and Budget . . . ."

To make the baseline estimate of the aggregate maximum offering price for fiscal year 2014, the Commission used a methodology similar to that developed in consultation with the Congressional Budget Office ("CBO") and Office of Management and Budget ("OMB") to project the aggregate offering price for purposes of the fiscal year 2012 annual adjustment (and identical to the methodology employed during fiscal year 2013). ${ }^{9}$ Using this methodology, the Commission determines the "baseline estimate of the aggregate maximum offering price" for fiscal year 2014 to be $\$ 3,766,638,654,272$. ${ }^{10}$ Based on this estimate, the Commission calculates the fee rate for fiscal 2014 to be \$128.80 per million. This adjusted fee rate applies to Section 6(b) of the Securities Act, as well as to Sections $13(\mathrm{e})$ and $14(\mathrm{~g})$ of the Exchange Act.
$9 \quad$ For the fiscal year 2011 estimate, the Commission used a ten-year series of monthly observations ending in March 2011. For fiscal year 2012, the Commission used a ten-year series ending in July 2011. For fiscal year 2013, the Commission used a ten-year series ending in July 2012. For fiscal year 2014, the Commission used a ten-year series ending in July 2013.

Appendix A explains how we determined the "baseline estimate of the aggregate maximum offering price" for fiscal year 2014 using our methodology, and then shows the purely arithmetical process of calculating the fiscal year 2014 annual adjustment based on that estimate. The appendix includes the data used by the Commission in making its "baseline estimate of the aggregate maximum offering price" for fiscal year 2014.

## III. Effective Dates of the Annual Adjustments

The fiscal year 2014 annual adjustments to the fee rates applicable under Section 6(b) of the Securities Act and Sections 13(e) and 14(g) of the Exchange Act will be effective on October 1, 2013. ${ }^{11}$

## IV. Conclusion

Accordingly, pursuant to Section 6(b) of the Securities Act and Sections 13(e) and $14(\mathrm{~g})$ of the Exchange Act, ${ }^{12}$

IT IS HEREBY ORDERED that the fee rates applicable under Section 6(b) of the Securities Act and Sections 13(e) and 14(g) of the Exchange Act shall be $\$ 128.80$ per million effective on October 1, 2013.

By the Commission.

Elizabeth M. Murphy
Secretary

[^0]
## APPENDIX A

With the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Congress has, among other things, established a target amount of monies to be collected from fees charged to issuers based on the value of their registrations. This appendix provides the formula for determining such fees, which the Commission adjusts annually. Congress has mandated that the Commission determine these fees based on the "aggregate maximum offering prices," which measures the aggregate dollar amount of securities registered with the Commission over the course of the year. 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 aggregate maximum offering prices. As a percentage, the fee rate equals the ratio of the target amounts of monies to the projected aggregate maximum offering prices.

For 2014, the Commission has estimated the aggregate maximum offering prices by projecting forward the trend established in the previous decade. More specifically, an ARIMA model was used to forecast the value of the aggregate maximum offering prices for months subsequent to July 2013, the last month for which the Commission has data on the aggregate maximum offering prices.

The following sections describe this process in detail.

## A. Baseline estimate of the aggregate maximum offering prices for fiscal year 2014.

First, calculate the aggregate maximum offering prices (AMOP) for each month in the sample (July 2003 - July 2013). Next, calculate the percentage change in the AMOP from month to month.

Model the monthly percentage change in AMOP as a first order moving average process. The moving average approach allows one to model the effect that an exceptionally high (or low) observation of AMOP tends to be followed by a more "typical" value of AMOP.

Use the estimated moving average model to forecast the monthly percent change in AMOP. These percent changes can then be applied to obtain forecasts of the total dollar value of registrations. The following is a more formal (mathematical) description of the procedure:

1. Begin with the monthly data for AMOP. The sample spans ten years, from July 2003 to July 2013.
2. Divide each month's AMOP (column C) by the number of trading days in that month (column B) to obtain the average daily AMOP (AAMOP, column D).
3. For each month $t$, the natural logarithm of AAMOP is reported in column E.
4. Calculate the change in $\log (\mathrm{AAMOP})$ from the previous month as $\Delta_{t}=\log \left(A A M O P_{t}\right)-\log \left(\mathrm{AAMOP}_{\mathrm{t}-1}\right)$. This approximates the percentage change.
5. Estimate the first order moving average model $\Delta_{t}=\alpha+\beta e_{t-1}+e_{t}$, where $e_{t}$ denotes the forecast error for month $t$. The forecast error is simply the difference between the one-month ahead forecast and the actual realization of $\Delta_{\mathrm{t}}$. The forecast error is expressed as $e_{t}=\Delta_{t}-\alpha-\beta e_{t-1}$. The model can be estimated using standard commercially available software. Using least squares, the estimated parameter values are $\alpha=-0.0003334$ and $\beta=-0.90946$.
6. For the month of August 2013 forecast $\Delta_{t=8 / 12}=\alpha+\beta e_{t=7 / 12}$. For all subsequent months, forecast $\Delta_{\mathrm{t}}=\alpha$.
7. Calculate forecasts of $\log (A A M O P)$. For example, the forecast of $\log (A A M O P)$ for October 2013 is given by FLAAMOP ${ }_{t=10 / 12}=\log \left(\right.$ AAMOP $\left._{t=7 / 12}\right)+\Delta_{t=8 / 12}+\Delta_{t}=$ $9 / 12+\Delta_{\mathrm{t}}=10 / 12$.
8. Under the assumption that $e_{t}$ is normally distributed, the n-step ahead forecast of AAMOP is given by $\exp \left(\right.$ FLAAMOP $\left._{t}+\sigma_{\mathrm{n}}{ }^{2} / 2\right)$, where $\sigma_{\mathrm{n}}$ denotes the standard error of the n-step ahead forecast.
9. For October 2013, this gives a forecast AAMOP of $\$ 14.93$ billion (Column I), and a forecast AMOP of $\$ 343.4$ billion (Column J).
10. Iterate this process through September 2014 to obtain a baseline estimate of the aggregate maximum offering prices for fiscal year 2014 of \$3,766,638,654,272.

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

1. Using the data from Table A, estimate the aggregate maximum offering prices between 10/1/13 and 9/30/14 to be $\$ 3,766,638,654,272$.
2. The rate necessary to collect the target $\$ 485,000,000$ in fee revenues set by Congress is then calculated as: $\$ 485,000,000 \div \$ 3,766,638,654,272=0.000128762$.
3. Round the result to the seventh decimal point, yielding a rate of 0.0001288 (or \$128.80 per million).

## Table A. Estimation of baseline of aggregate maximum offering prices .

## Fee rate calculation.

| a. Baseline estimate of the aggregate maximum offering prices, $10 / 1 / 13$ to $9 / 30 / 14$ (\$Millions) | $3,766,639$ |
| :--- | ---: |
| b. Implied fee rate ( $\$ 485$ Million / a) | $\$ 128.80$ |


| (A) <br> Month | (B) \# of Trading Days in Month | (C) <br> Aggregate Maximum Offering Prices, in \$Millions | (D) <br> Average Daily Aggregate Max. Offering Prices (AAMOP) in \$Millions | $\begin{gathered} (\mathrm{E}) \\ \log (\mathrm{AAMOP}) \end{gathered}$ | (F) <br> Log (Change in AAMOP) | $\begin{gathered} (\mathrm{G}) \\ \text { Forecast } \\ \log (\text { AAMOP }) \end{gathered}$ | (H) Standard Error | (I) <br> Forecast AAMOP, in \$Millions | (J) <br> Forecast Aggregate Maximum Offering Prices, in \$Millions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jul-03 | 22 | 304,383 | 13,836 | 23.351 |  |  |  |  |  |
| Aug-03 | 21 | 328,351 | 15,636 | 23.473 | 0.122 |  |  |  |  |
| Sep-03 | 21 | 459,563 | 21,884 | 23.809 | 0.336 |  |  |  |  |
| Oct-03 | 23 | 285,039 | 12,393 | 23.240 | -0.569 |  |  |  |  |
| Nov-03 | 19 | 257,779 | 13,567 | 23.331 | 0.091 |  |  |  |  |
| Dec-03 | 22 | 244,998 | 11,136 | 23.133 | -0.197 |  |  |  |  |
| Jan-04 | 20 | 369,784 | 18,489 | 23.640 | 0.507 |  |  |  |  |
| Feb-04 | 19 | 221,517 | 11,659 | 23.179 | -0.461 |  |  |  |  |
| Mar-04 | 23 | 448,543 | 19,502 | 23.694 | 0.514 |  |  |  |  |
| Apr-04 | 21 | 260,029 | 12,382 | 23.240 | -0.454 |  |  |  |  |
| May-04 | 20 | 227,239 | 11,362 | 23.154 | -0.086 |  |  |  |  |
| Jun-04 | 21 | 370,668 | 17,651 | 23.594 | 0.441 |  |  |  |  |
| Jul-04 | 21 | 305,519 | 14,549 | 23.401 | -0.193 |  |  |  |  |
| Aug-04 | 22 | 179,688 | 8,168 | 22.823 | -0.577 |  |  |  |  |
| Sep-04 | 21 | 357,007 | 17,000 | 23.556 | 0.733 |  |  |  |  |
| Oct-04 | 21 | 254,489 | 12,119 | 23.218 | -0.338 |  |  |  |  |
| Nov-04 | 21 | 363,406 | 17,305 | 23.574 | 0.356 |  |  |  |  |
| Dec-04 | 22 | 570,918 | 25,951 | 23.979 | 0.405 |  |  |  |  |
| Jan-05 | 20 | 375,484 | 18,774 | 23.656 | -0.324 |  |  |  |  |
| Feb-05 | 19 | 338,922 | 17,838 | 23.605 | -0.051 |  |  |  |  |
| Mar-05 | 22 | 590,862 | 26,857 | 24.014 | 0.409 |  |  |  |  |
| Apr-05 | 21 | 282,018 | 13,429 | 23.321 | -0.693 |  |  |  |  |


| (A) <br> Month | (B) \# of Trading Days in Month | (C) <br> Aggregate Maximum Offering Prices, in \$Millions | (D) <br> Average Daily Aggregate Max. Offering Prices (AAMOP) in \$Millions | $\begin{gathered} (\mathrm{E}) \\ \log (\mathrm{AAMOP}) \end{gathered}$ | (F) <br> Log (Change in <br> AAMOP) | $\begin{gathered} (\mathrm{G}) \\ \text { Forecast } \\ \log (\mathrm{AAMOP}) \end{gathered}$ | (H) Standard Error | (I) <br> Forecast AAMOP, in \$Millions | (J) <br> Forecast Aggregate Maximum Offering Prices, in \$Millions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| May-05 | 21 | 323,652 | 15,412 | 23.458 | 0.138 |  |  |  |  |
| Jun-05 | 22 | 517,022 | 23,501 | 23.880 | 0.422 |  |  |  |  |
| Jul-05 | 20 | 457,487 | 22,874 | 23.853 | -0.027 |  |  |  |  |
| Aug-05 | 23 | 605,534 | 26,328 | 23.994 | 0.141 |  |  |  |  |
| Sep-05 | 21 | 312,281 | 14,871 | 23.423 | -0.571 |  |  |  |  |
| Oct-05 | 21 | 258,956 | 12,331 | 23.235 | -0.187 |  |  |  |  |
| Nov-05 | 21 | 192,736 | 9,178 | 22.940 | -0.295 |  |  |  |  |
| Dec-05 | 21 | 308,134 | 14,673 | 23.409 | 0.469 |  |  |  |  |
| Jan-06 | 20 | 526,550 | 26,328 | 23.994 | 0.585 |  |  |  |  |
| Feb-06 | 19 | 301,446 | 15,866 | 23.487 | -0.506 |  |  |  |  |
| Mar-06 | 23 | 1,211,344 | 52,667 | 24.687 | 1.200 |  |  |  |  |
| Apr-06 | 19 | 407,345 | 21,439 | 23.788 | -0.899 |  |  |  |  |
| May-06 | 22 | 260,121 | 11,824 | 23.193 | -0.595 |  |  |  |  |
| Jun-06 | 22 | 375,296 | 17,059 | 23.560 | 0.367 |  |  |  |  |
| Jul-06 | 20 | 232,654 | 11,633 | 23.177 | -0.383 |  |  |  |  |
| Aug-06 | 23 | 310,050 | 13,480 | 23.325 | 0.147 |  |  |  |  |
| Sep-06 | 20 | 236,782 | 11,839 | 23.195 | -0.130 |  |  |  |  |
| Oct-06 | 22 | 213,342 | 9,697 | 22.995 | -0.200 |  |  |  |  |
| Nov-06 | 21 | 292,456 | 13,926 | 23.357 | 0.362 |  |  |  |  |
| Dec-06 | 20 | 349,512 | 17,476 | 23.584 | 0.227 |  |  |  |  |
| Jan-07 | 20 | 372,740 | 18,637 | 23.648 | 0.064 |  |  |  |  |
| Feb-07 | 19 | 278,753 | 14,671 | 23.409 | -0.239 |  |  |  |  |
| Mar-07 | 22 | 862,786 | 39,218 | 24.392 | 0.983 |  |  |  |  |
| Apr-07 | 20 | 562,103 | 28,105 | 24.059 | -0.333 |  |  |  |  |
| May-07 | 22 | 470,843 | 21,402 | 23.787 | -0.272 |  |  |  |  |
| Jun-07 | 21 | 586,822 | 27,944 | 24.053 | 0.267 |  |  |  |  |
| Jul-07 | 21 | 326,612 | 15,553 | 23.468 | -0.586 |  |  |  |  |
| Aug-07 | 23 | 369,172 | 16,051 | 23.499 | 0.032 |  |  |  |  |
| Sep-07 | 19 | 241,059 | 12,687 | 23.264 | -0.235 |  |  |  |  |


| (A) <br> Month | (B) \# of Trading Days in Month | (C) <br> Aggregate Maximum Offering Prices, in \$Millions | (D) <br> Average Daily Aggregate Max. Offering Prices (AAMOP) in \$Millions | $\begin{gathered} (\mathrm{E}) \\ \log (\mathrm{AAMOP}) \end{gathered}$ | (F) <br> Log (Change in <br> AAMOP) | (G) <br> Forecast $\log (\mathrm{AAMOP})$ | (H) Standard Error | (I) <br> Forecast AAMOP, in \$Millions | (J) <br> Forecast Aggregate Maximum Offering Prices, in \$Millions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct-07 | 23 | 239,652 | 10,420 | 23.067 | -0.197 |  |  |  |  |
| Nov-07 | 21 | 458,654 | 21,841 | 23.807 | 0.740 |  |  |  |  |
| Dec-07 | 20 | 410,200 | 20,510 | 23.744 | -0.063 |  |  |  |  |
| Jan-08 | 21 | 354,433 | 16,878 | 23.549 | -0.195 |  |  |  |  |
| Feb-08 | 20 | 263,410 | 13,171 | 23.301 | -0.248 |  |  |  |  |
| Mar-08 | 20 | 596,923 | 29,846 | 24.119 | 0.818 |  |  |  |  |
| Apr-08 | 22 | 292,534 | 13,297 | 23.311 | -0.809 |  |  |  |  |
| May-08 | 21 | 456,077 | 21,718 | 23.801 | 0.491 |  |  |  |  |
| Jun-08 | 21 | 461,087 | 21,957 | 23.812 | 0.011 |  |  |  |  |
| Jul-08 | 22 | 232,896 | 10,586 | 23.083 | -0.730 |  |  |  |  |
| Aug-08 | 21 | 395,440 | 18,830 | 23.659 | 0.576 |  |  |  |  |
| Sep-08 | 21 | 177,636 | 8,459 | 22.858 | -0.800 |  |  |  |  |
| Oct-08 | 23 | 360,494 | 15,674 | 23.475 | 0.617 |  |  |  |  |
| Nov-08 | 19 | 288,911 | 15,206 | 23.445 | -0.030 |  |  |  |  |
| Dec-08 | 22 | 319,584 | 14,527 | 23.399 | -0.046 |  |  |  |  |
| Jan-09 | 20 | 375,065 | 18,753 | 23.655 | 0.255 |  |  |  |  |
| Feb-09 | 19 | 249,666 | 13,140 | 23.299 | -0.356 |  |  |  |  |
| Mar-09 | 22 | 739,931 | 33,633 | 24.239 | 0.940 |  |  |  |  |
| Apr-09 | 21 | 235,914 | 11,234 | 23.142 | -1.097 |  |  |  |  |
| May-09 | 20 | 329,522 | 16,476 | 23.525 | 0.383 |  |  |  |  |
| Jun-09 | 22 | 357,524 | 16,251 | 23.511 | -0.014 |  |  |  |  |
| Jul-09 | 22 | 185,187 | 8,418 | 22.854 | -0.658 |  |  |  |  |
| Aug-09 | 21 | 192,726 | 9,177 | 22.940 | 0.086 |  |  |  |  |
| Sep-09 | 21 | 189,224 | 9,011 | 22.922 | -0.018 |  |  |  |  |
| Oct-09 | 22 | 215,720 | 9,805 | 23.006 | 0.085 |  |  |  |  |
| Nov-09 | 20 | 248,353 | 12,418 | 23.242 | 0.236 |  |  |  |  |
| Dec-09 | 22 | 340,464 | 15,476 | 23.463 | 0.220 |  |  |  |  |
| Jan-10 | 19 | 173,235 | 9,118 | 22.933 | -0.529 |  |  |  |  |
| Feb-10 | 19 | 209,963 | 11,051 | 23.126 | 0.192 |  |  |  |  |


| (A) <br> Month | (B) \# of Trading Days in Month | (C) <br> Aggregate Maximum Offering Prices, in \$Millions | (D) <br> Average Daily Aggregate Max. Offering Prices (AAMOP) in \$Millions | $\begin{gathered} (\mathrm{E}) \\ \log (\text { AAMOP }) \end{gathered}$ | (F) Log (Change in AAMOP) | (G) <br> Forecast $\log (\mathrm{AAMOP})$ | (H) Standard Error | (I) <br> Forecast AAMOP, in \$Millions | (J) <br> Forecast Aggregate Maximum Offering Prices, in \$Millions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mar-10 | 23 | 432,934 | 18,823 | 23.658 | 0.533 |  |  |  |  |
| Apr-10 | 21 | 280,188 | 13,342 | 23.314 | -0.344 |  |  |  |  |
| May-10 | 20 | 278,611 | 13,931 | 23.357 | 0.043 |  |  |  |  |
| Jun-10 | 22 | 364,251 | 16,557 | 23.530 | 0.173 |  |  |  |  |
| Jul-10 | 21 | 171,191 | 8,152 | 22.822 | -0.709 |  |  |  |  |
| Aug-10 | 22 | 240,793 | 10,945 | 23.116 | 0.295 |  |  |  |  |
| Sep-10 | 21 | 260,783 | 12,418 | 23.242 | 0.126 |  |  |  |  |
| Oct-10 | 21 | 214,988 | 10,238 | 23.049 | -0.193 |  |  |  |  |
| Nov-10 | 21 | 340,112 | 16,196 | 23.508 | 0.459 |  |  |  |  |
| Dec-10 | 22 | 297,992 | 13,545 | 23.329 | -0.179 |  |  |  |  |
| Jan-11 | 20 | 233,668 | 11,683 | 23.181 | -0.148 |  |  |  |  |
| Feb-11 | 19 | 252,785 | 13,304 | 23.311 | 0.130 |  |  |  |  |
| Mar-11 | 23 | 595,198 | 25,878 | 23.977 | 0.665 |  |  |  |  |
| Apr-11 | 20 | 236,355 | 11,818 | 23.193 | -0.784 |  |  |  |  |
| May-11 | 21 | 319,053 | 15,193 | 23.444 | 0.251 |  |  |  |  |
| Jun-11 | 22 | 359,727 | 16,351 | 23.518 | 0.073 |  |  |  |  |
| Jul-11 | 20 | 215,391 | 10,770 | 23.100 | -0.418 |  |  |  |  |
| Aug-11 | 23 | 179,870 | 7,820 | 22.780 | -0.320 |  |  |  |  |
| Sep-11 | 21 | 168,005 | 8,000 | 22.803 | 0.023 |  |  |  |  |
| Oct-11 | 21 | 181,452 | 8,641 | 22.880 | 0.077 |  |  |  |  |
| Nov-11 | 21 | 256,418 | 12,210 | 23.226 | 0.346 |  |  |  |  |
| Dec-11 | 21 | 237,652 | 11,317 | 23.150 | -0.076 |  |  |  |  |
| Jan-12 | 20 | 276,965 | 13,848 | 23.351 | 0.202 |  |  |  |  |
| Feb-12 | 20 | 228,419 | 11,421 | 23.159 | -0.193 |  |  |  |  |
| Mar-12 | 22 | 430,806 | 19,582 | 23.698 | 0.539 |  |  |  |  |
| Apr-12 | 20 | 173,626 | 8,681 | 22.884 | -0.813 |  |  |  |  |
| May-12 | 22 | 414,122 | 18,824 | 23.658 | 0.774 |  |  |  |  |
| Jun-12 | 21 | 272,218 | 12,963 | 23.285 | -0.373 |  |  |  |  |
| Jul-12 | 21 | 170,462 | 8,117 | 22.817 | -0.468 |  |  |  |  |


| (A) <br> Month | (B) \# of Trading Days in Month | (C) <br> Aggregate Maximum Offering Prices, in \$Millions | (D) <br> Average Daily Aggregate Max. Offering Prices (AAMOP) in \$Millions | $\begin{gathered} (\mathrm{E}) \\ \log (\mathrm{AAMOP}) \end{gathered}$ | (F) <br> Log (Change in <br> AAMOP) | $\begin{gathered} (\mathrm{G}) \\ \text { Forecast } \\ \log (\mathrm{AAMOP}) \end{gathered}$ | (H) Standard Error | (I) <br> Forecast AAMOP, in \$Millions | (J) <br> Forecast Aggregate Maximum Offering Prices, in \$Millions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug-12 | 23 | 295,472 | 12,847 | 23.276 | 0.459 |  |  |  |  |
| Sep-12 | 19 | 331,295 | 17,437 | 23.582 | 0.305 |  |  |  |  |
| Oct-12 | 21 | 137,562 | 6,551 | 22.603 | -0.979 |  |  |  |  |
| Nov-12 | 21 | 221,521 | 10,549 | 23.079 | 0.476 |  |  |  |  |
| Dec-12 | 20 | 321,602 | 16,080 | 23.501 | 0.422 |  |  |  |  |
| Jan-13 | 21 | 368,488 | 17,547 | 23.588 | 0.087 |  |  |  |  |
| Feb-13 | 19 | 252,148 | 13,271 | 23.309 | -0.279 |  |  |  |  |
| Mar-13 | 20 | 533,440 | 26,672 | 24.007 | 0.698 |  |  |  |  |
| Apr-13 | 22 | 235,779 | 10,717 | 23.095 | -0.912 |  |  |  |  |
| May-13 | 22 | 382,950 | 17,407 | 23.580 | 0.485 |  |  |  |  |
| Jun-13 | 20 | 480,624 | 24,031 | 23.903 | 0.322 |  |  |  |  |
| Jul-13 | 22 | 263,869 | 11,994 | 23.208 | -0.695 |  |  |  |  |
| Aug-13 | 22 |  |  |  |  | 23.361073 | 0.361 | 14,924 | 328,338 |
| Sep-13 | 20 |  |  |  |  | 23.360740 | 0.363 | 14,927 | 298,549 |
| Oct-13 | 23 |  |  |  |  | 23.360406 | 0.364 | 14,930 | 343,400 |
| Nov-13 | 20 |  |  |  |  | 23.360073 | 0.366 | 14,933 | 298,669 |
| Dec-13 | 21 |  |  |  |  | 23.359739 | 0.367 | 14,936 | 313,666 |
| Jan-14 | 21 |  |  |  |  | 23.359406 | 0.368 | 14,939 | 313,729 |
| Feb-14 | 19 |  |  |  |  | 23.359073 | 0.370 | 14,942 | 283,907 |
| Mar-14 | 21 |  |  |  |  | 23.358739 | 0.371 | 14,945 | 313,855 |
| Apr-14 | 21 |  |  |  |  | 23.358406 | 0.373 | 14,948 | 313,918 |
| May-14 | 21 |  |  |  |  | 23.358073 | 0.374 | 14,951 | 313,981 |
| Jun-14 | 21 |  |  |  |  | 23.357739 | 0.376 | 14,954 | 314,044 |
| Jul-14 | 22 |  |  |  |  | 23.357406 | 0.377 | 14,957 | 329,065 |
| Aug-14 | 21 |  |  |  |  | 23.357073 | 0.378 | 14,961 | 314,171 |
| Sep-14 | 21 |  |  |  |  | 23.356739 | 0.380 | 14,964 | 314,234 |

Figure A
Aggregate Maximum Offering Prices Subject to Securities Act Section 6(b) (Dashed Line Indicates Forecast Values)



[^0]:    11
    15 U.S.C. 77f(b)(4), 15 U.S.C. 78m(e)(6) and 15 U.S.C. 78n(g)(6).
    12
    15 U.S.C. $77 \mathrm{f}(\mathrm{b}), 78 \mathrm{~m}(\mathrm{e})$ and $78 \mathrm{n}(\mathrm{g})$.

