

tion between the issuer and each of the winning bidders. The MSRB also believes that in many cases such dealer-intermediary may be acting as an underwriter, as such term is defined in Rule 15c2-12(f)(8) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”).<sup>1</sup> A dealer-intermediary that is effecting transactions in connection with such an auction process has certain obligations under rule G-32. If it is also an underwriter with respect to an offering, it has certain additional obligations under rules G-32 and G-36.

#### **Application of Rule G-32, on Disclosures in Connection with New Issues**

Rule G-32(a) generally requires that any dealer (*i.e.*, not just the underwriter) selling municipal securities to a customer during the issue’s underwriting period must deliver the official statement in final form, if any, to the customer by settlement of the transaction. Any dealer selling a new issue municipal security to another dealer is obligated under rule G-32(b) to send such official statement to the purchasing dealer within one business day of request. In addition, under rule G-32(c), the managing or sole underwriter for new issue municipal securities is obligated to send to any dealer purchasing such securities (regardless of whether the securities were purchased from such managing or sole underwriter or from another dealer), within one business day of request, one official statement plus one additional copy per \$100,000 par value of the new issue municipal securities sold by such dealer to customers. Where multiple underwriters underwrite a new issue without forming an underwriting syndicate, each underwriter is considered a sole underwriter for purposes of rule G-32 and therefore each must undertake the official statement delivery obligation described in the preceding sentence.

If a dealer-intermediary is involved in an auction or similar process of primary offering of municipal securities in which all or a portion of the securities are sold directly to investors that have placed winning bids with the issuer, the dealer-intermediary is obligated under rule G-32(a) to deliver an official statement to such investors by settlement of their purchases. If all or a portion of the securities are sold to other dealers that have placed winning bids with the issuer, the dealer-intermediary is obligated under rule G-32(b) to send an official statement to such purchasing dealers within one business day of a request. Further, to the extent that the dealer-intermediary is an underwriter, such dealer-intermediary typically would have the obligations of a sole underwriter under rule G-32(c) to distribute the official statement to any other dealer that subsequently purchases the securities during the underwriting period and requests a copy. Any dealer that has placed a winning bid in a new issue auction would have the same distribution responsibility under rule G-32(c), to the extent that it is acting as an underwriter.

The MSRB views rule G-32 as permitting one or more dealer-intermediaries involved in an auction process to enter into an agreement with one or more other dealers that have purchased securities through a winning bid in which the parties agree that

one such dealer (*i.e.*, a dealer-intermediary or one of the winning bidders) will serve in the role of managing underwriter for purposes of rule G-32. In such a case, such single dealer (rather than all dealers individually) would have the responsibility for distribution of official statements to the marketplace typically undertaken by a managing or sole underwriter under rule G-32(c).<sup>2</sup> Such an agreement may be entered into by less than all dealers that have purchased securities through the auction process. All dealers that agree to delegate this duty to a single dealer may rely on such delegation to the same extent as if they had in fact formed an underwriting syndicate.

#### **Application of Rule G-36, on Delivery of Official Statements, Advance Refunding Documents and Forms G-36(OS) and G-36(ARD) to the MSRB**

Rule G-36 requires that the managing or sole underwriter for most primary offerings send the official statement and Form G-36(OS) to the MSRB within certain time frames set forth in the rule. In addition, if the new issue is an advance refunding and an advance refunding document has been prepared, the advance refunding document and Form G-36(ARD) also must be sent to the MSRB by the managing or sole underwriter. Where multiple underwriters underwrite an offering without forming an underwriting syndicate, the MSRB has stated that each underwriter would have the role of sole underwriter for purposes of rule G-36 and therefore each would have a separate obligation to send official statements, advance refunding documents and Forms G-36(OS) and G-36(ARD) to the MSRB.<sup>3</sup>

To the extent that the dealer-intermediary in an auction or similar process of primary offering of municipal securities is an underwriter for purposes of the Exchange Act, such dealer-intermediary would have obligations under rule G-36. If all or a portion of the securities are sold directly to investors that have placed winning bids with the issuer, the dealer-intermediary would be obligated to send the official statement and Form G-36(OS) (as well as any applicable advance refunding document and Form G-36(ARD)) to the MSRB with respect to the issue or portion thereof purchased by investors. If all or a portion of the securities are sold to other dealers that have placed winning bids with the issuer, the dealer-intermediary and each of the purchasing dealers (to the extent that they are underwriters for purposes of the Exchange Act) also typically would be separately obligated to send such documents to the MSRB with respect to the issue or portion thereof purchased by dealers.

To avoid duplicative filings under rule G-36, the MSRB believes that one or more dealer-intermediaries involved in an auction process may enter into an agreement with one or more other dealers that have purchased securities through a winning bid in which the parties agree that one such dealer (*i.e.*, a dealer-intermediary or one of the winning bidders) will serve in the role of managing underwriter for purposes of rule G-36. In such a case, such single dealer (rather than all dealers individually) would have the responsibility for sending the

official statement, advance refunding document and Forms G-36(OS) and G-36(ARD) to the MSRB.<sup>4</sup> Such an agreement may be entered into by less than all dealers that have purchased securities. All dealers that agree to delegate this duty to a single dealer may rely on such delegation to the same extent as if they had in fact formed an underwriting syndicate.

<sup>1</sup> Questions regarding whether an entity acting in an intermediary role is effecting a transaction or whether a dealer acting in such an intermediary role for a particular primary offering of municipal securities would constitute an underwriter should be addressed to staff of the Securities and Exchange Commission.

<sup>2</sup> Each dealer that is party to this agreement would be required to inform any dealer seeking copies of the official statement from such dealer under rule G-32(c) of the identity of the dealer that has by agreement undertaken this obligation or, in the alternative, may fulfill the request for official statements. In either case, the dealer would be required to act promptly so as either to permit the dealer undertaking the distribution obligation to fulfill its duty in a timely manner or to provide the official statement itself in the time required by the rule. Such agreement would not affect the obligation of a dealer that sells new issue securities to another dealer to provide a copy of the official statement to such dealer upon request as required under rule G-32(b), nor would it affect the obligation to deliver official statements to customers as required under rule G-32(a).

<sup>3</sup> See Rule G-36 Interpretive Letter — Multiple underwriters, MSRB interpretation of January 30, 1998, *MSRB Rule Book* (January 1, 2001) at 189.

<sup>4</sup> The dealer designated to act as managing underwriter for purposes of rule G-36 would be billed the full amount of any applicable underwriting assessment due under rule A-13, on underwriting and transaction assessments. Such dealer would be permitted, in turn, to bill each other dealer that is party to the agreement for its share of the assessment.

### **Non-Material Amendments to Official Statements for Municipal Fund Securities<sup>[1]</sup>**

May 14, 2002

The MSRB understands that an issuer [of municipal fund securities] may make minor modifications to the official statement in order to correct typographical or grammatical errors, or to make such other modifications that the issuer may deem to be immaterial. If the issuer has acknowledged in writing to the primary distributor that it does not consider such modification to be material to investors and does not believe that such modification is required to make the statements in the official statement not misleading, then the modification need not be sent by a dealer to a customer that has previously received the official statement, notwithstanding the provisions of Rule G-32(a)(i).<sup>1</sup> The primary distributor must maintain the issuer's written acknowledgement under Rule G-8(a)(xiii), relating to records concerning deliveries of official statements. The primary distributor must send all amendments, regardless of materiality, to the MSRB under Rule G-36.

<sup>[1]</sup> [This interpretation is an excerpt from "Application of Fair Practice and Advertising Rules to Municipal Fund Securities," May 14, 2002. The remaining portions of the 2002 interpretation have been superseded by other interpretations and rule changes.]

<sup>1</sup> Rule G-32(a)(i) requires delivery of an official statement to a customer purchasing municipal fund securities by settlement of the transaction. In the case of a repeat purchaser who has already received the official

statement, dealers generally are required to deliver any amendments or supplements to the official statement in connection with subsequent purchases of the securities. [footnote has been renumbered]

### **Rule G-32 Interpretation — Notice Regarding Electronic Delivery and Receipt of Information by Municipal Advisors**

October 13, 2017

In November 1998, the MSRB published an interpretation about the use of electronic media to deliver and receive information by brokers, dealers and municipal securities dealers under Board rules (the "1998 interpretation"). Since that time, the MSRB has been granted rulemaking authority over municipal advisors, and in the exercise of that authority, the MSRB has been developing a comprehensive regulatory framework for municipal advisors.

The Board believes that the use of electronic media to deliver and receive information under Board rules also is important for municipal advisors, and extends the guidance provided in the 1998 interpretation, as relevant, to municipal advisors. See Rule G-32 Interpretation — Notice Regarding Electronic Delivery and Receipt of Information by Brokers, Dealers and Municipal Securities Dealers (November 20, 1998).

See also:

**Rule D-12 Interpretation — Interpretation Relating to Sales of Municipal Fund Securities in the Primary Market**, January 18, 2001.

**Rule G-14 Interpretation — Build America Bonds and Other Tax Credit Bonds**, April 24, 2009.

**Rule G-15 Interpretation — Notice Concerning Stripped Coupon Municipal Securities**, March 13, 1989.

**Rule G-17 Interpretation — Interpretation on Customer Protection Obligations Relating to the Marketing of 529 College Savings Plans**, August 7, 2006.

### **Interpretive Letters**

**Furnishing of official statements: duplication of copies.** [It] is the Board's position that if an official statement is made available by an issuer, it is incumbent upon municipal securities dealers to see that their customers receive copies of the official statement. A municipal securities dealer cannot avoid the rule on the grounds that the issuer did not supply a sufficient number of official statements for distribution. The dealer in such a case has to bear the burden of reproducing the official statement. *MSRB interpretation of March 7, 1979.*

**NOTE: The above letter refers to the text of rule G-32 as in effect prior to amendments effective on August 30, 1985.**

**Disclosure of underwriting spread.** As you know, Board rule G-32 provides that a dealer selling new issue municipal securities must furnish its customers with certain information at or prior to sending final money confirmations. Under subparagraph (a)(ii) of the rule, in the case of a negotiated sale,

the dealer must furnish certain specified information about the underwriting arrangements, including the “underwriting spread.” The Board has interpreted this provision to require that the gross spread (*i.e.*, the difference between the initial reoffering prices and the amount paid to the issuer) be shown. The Board has also indicated that the gross spread may be expressed either in dollars or in points per bond.

The Board recently issued an interpretation of rule G-32(a)(ii) to the effect that the underwriting spread may be expressed either as a total amount or as a listing of the components of the gross spread. Thus, for example, the following disclosure would meet the requirements of the rule:

*Application of Proceeds*

Construction Costs	\$120,000,000
Underwriter’s discount <sup>1</sup>	2,500,000
Legal expenses	200,000
Printing and Miscellaneous expenses	300,000
Principal amount of bonds	123,000,000

Should you have any questions concerning this interpretation, please call me. *MSRB interpretation of March 9, 1981.*

**NOTE: The above letter refers to the text of rule G-32 as in effect prior to amendments effective on August 30, 1985.**

<sup>1</sup> If a dealer expresses the underwriting spread as a listing of the components of the gross spread, that portion of the proceeds which represents compensation to the underwriters must, in the Board’s view, be clearly identified as such. Thus, use of the terms “underwriter’s discount” or “net to underwriters” would be acceptable; the term “bond discount,” however, is confusing and is, therefore, inappropriate.

**Disclosures in connection with new issues.** This is in response to your November 30, 1993 letter requesting interpretive guidance regarding Board rule G-32(a)(ii)(C). That provision requires dealers in connection with a negotiated sale of new issue municipal securities to disclose “the initial offering price for each maturity in the issue that is offered or to be offered in whole or in part by the underwriters.” You inquired as to whether the term “initial offering price” as used in this provision could be stated in terms of yield. The Board has reviewed your request and authorized this response.

Rule G-32 requires dealers selling new issue municipal securities to provide certain written information to customers. In connection with new negotiated issues, paragraph (a)(ii) of the rule requires that this written information include the underwriting spread, the amount of any fee received by a dealer as agent for the issuer in the distribution of the securities for each maturity in the issue that is offered or to be offered in whole or in part by the underwriters, and the initial offering price of each maturity.<sup>1</sup>

With respect to the “initial offering price,” the Board has concluded that this price may be expressed either in terms of dollar price or yield. Since customer confirmations generally must show both dollar price and yield, the Board believes that

either form of “initial offering price” would provide customers with the requisite comparative data about the relationship between the initial offering price and the price of the securities being purchased. *MSRB interpretation of December 22, 1993.*

<sup>1</sup> If this information is stated in the official statement, compliance can be achieved by delivering the official statement to the customer, prior to settlement, as is required, in any case, by rule G-32(a)(i). However, if the information is not in the official statement, this information must be delivered no later than the settlement of the transaction.

**See also:**

**Rule G-15 Interpretive Letter — Callable securities: pricing to call and extraordinary mandatory redemption features,** *MSRB interpretation of February 10, 1984.*

**Rule G-30 Interpretive Letter — Differential re-offering prices,** *MSRB interpretation of December 11, 2001.*

**Rule G-32 Amendment History (since 2003)**

[Release No. 34-86219 \(June 27, 2019\), 84 FR 31961 \(July 3, 2019\); MSRB Notice 2019-15 \(June 28, 2019\)](#)

[Release No. 34-79801 \(January 13, 2017\), 82 FR 7898 \(January 23, 2017\); MSRB Notice 2017-03 \(January 18, 2017\)](#)

[Release No. 34-70532 \(September 26, 2013\), 78 FR 60956 \(October 2, 2013\); MSRB Notice 2013-20 \(September 27, 2013\)](#)

[Release No. 34-68472 \(December 19, 2012\), 77 FR 76146 \(December 26, 2012\); MSRB Notice 2012-64 \(December 24, 2012\)](#)

[Release No. 34-62182 \(May 26, 2010\), 75 FR 30893 \(June 2, 2010\); MSRB Notice 2010-15 \(June 2, 2010\)](#)

[Release No. 34-60783 \(October 2, 2009\), 74 FR 52292 \(October 9, 2009\); MSRB Notice 2009-56 \(September 30, 2009\)](#)

[Release No. 34-59966 \(May 21, 2009\), 74 FR 25790 \(May 29, 2009\); MSRB Notice 2009-22 \(May 22, 2009\)](#)

[Release No. 34-52333 \(August 25, 2005\), 70 FR 51857 \(August 31, 2005\); MSRB Notice 2005-47 \(August 30, 2005\)](#)

**Rule G-33**

**Calculations**

(a) *Accrued Interest.* Accrued interest shall be computed in accordance with the following formula:

$$\text{Interest} = \frac{\text{Rate} \times \text{Par Value}}{\text{of Transaction}} \times \frac{\text{Number of Days}}{\text{Number of Days in Year}}$$

For purposes of this formula, the “number of days” shall be deemed to be the number of days from the previous interest payment date (from the dated date, in the case of first coupons) up to, but not including, the settlement date. The “number of days” and the “number of days in year” shall be counted in accordance with the requirements of section (e) below.

(b) *Interest-Bearing Securities.*

(i) *Dollar Price.* For transactions in interest-bearing securities effected on the basis of yield the resulting dollar price shall be computed in accordance with the following provisions:

(A) *Securities Paying Interest Solely at Redemption.* Except as otherwise provided in this section (b), the dollar price for a transaction in a security paying interest solely at redemption shall be computed in accordance with the following formula:

$$P = \left[ \frac{RV + \left( \frac{DIR}{B} \cdot R \right)}{1 + \left( \frac{DIR - A}{B} \cdot Y \right)} \right] - \left[ \frac{A}{B} \cdot R \right]$$

For purposes of this formula the symbols shall be defined as follows:

“A” is the number of accrued days from the beginning of the interest payment period to the settlement date (computed in accordance with the provisions of section (e) below);

“B” is the number of days in the year (computed in accordance with the provisions of section (e) below);

“DIR” is the number of days from the issue date to the redemption date (computed in accordance with the provisions of section (c) below);

“P” is the dollar price of the security for each \$100 par value (divided by 100);

“R” is the annual interest rate (expressed as a decimal);

“RV” is the redemption value of the security per \$100 par value (divided by 100); and

“Y” is the yield price of the transaction (expressed as a decimal).

(B) *Securities with Periodic Interest Payments.* Except as otherwise provided in this section (b), the dollar price for a transaction in a security with periodic interest payments shall be computed as follows:

(1) for securities with one coupon period or less to redemption, the following formula shall be used:

$$P = \left[ \frac{\frac{RV}{100} + \frac{R}{M}}{1 + \left( \frac{E - A}{E} \cdot \frac{Y}{M} \right)} \right] - \left[ \frac{A}{B} \cdot R \right]$$

For purposes of this formula the symbols shall be defined as follows:

“A” is the number of accrued days from the beginning of the interest payment period to the settlement date (computed in accordance with the provisions of section (e) below);

“B” is the number of days in the year (computed in accordance with the provisions of section (e) below);

“E” is the number of days in the interest payment period in which the settlement date falls (computed in accordance with the provisions of section (e) below);

“M” is the number of interest payment periods per year standard for the security involved in the transaction;

“P” is the dollar price of the security for each \$100 par value (divided by 100);

“R” is the annual interest rate (expressed as a decimal);

“RV” is the redemption value of the security per \$100 par value; and

“Y” is the yield price of the transaction (expressed as a decimal).

(2) for securities with more than one coupon period to redemption, the following formula shall be used:

$$P = \left[ \frac{RV}{\left(1 + \frac{Y}{M}\right)_{exp}^{N-1} + \frac{E-A}{E}} \right] + \left[ \sum_{k=1}^N \frac{100 \cdot \frac{R}{M}}{\left(1 + \frac{Y}{M}\right)_{exp}^{k-1} + \frac{E-A}{E}} \right] - \left[ 100 \cdot \frac{A}{B} \cdot R \right]$$

For purposes of this formula the symbols shall be defined as follows:

“A” is the number of accrued days from beginning of the interest payment period to the settlement date (computed in accordance with the provisions of section (e) below);

“B” is the number of days in the year (computed in accordance with the provisions of section (e) below);

“E” is the number of days in the interest payment period in which the settlement date falls (computed in accordance with the provisions of section (e) below);

“M” is the number of interest payment periods per year standard for the security involved in the transaction;

“N” is the number of interest payments (expressed as a whole number) occurring between the settlement date and the redemption date, including the payment on the redemption date;

“P” is the dollar price of the security for each \$100 par value;

“R” is the annual interest rate (expressed as a decimal);

“RV” is the redemption value of the security per \$100 par value; and

“Y” is the yield price of the transaction (expressed as a decimal).

For purposes of this formula the symbol “exp” shall signify that the preceding value shall be raised to the power indicated by the succeeding value; for purposes of this formula the symbol “K” shall signify successively each whole number from “1” to “N” inclusive; for purposes of this formula the symbol “sigma” shall signify that the succeeding term shall be computed for each value “K” and that the results of such computations shall be summed.

(ii) *Yield.* Yields on interest-bearing securities shall be computed in accordance with the following provisions:

(A) *Securities Paying Interest Solely at Redemption.* The yield of a transaction in a security paying interest solely at redemption shall be computed in accordance with the following formula:

$$Y = \left[ \frac{\left( RV + \left( \frac{DIR \cdot R}{B} \right) \right) - \left( P + \left( \frac{A \cdot R}{B} \right) \right)}{P + \left( \frac{A \cdot R}{B} \right)} \right] \cdot \left[ \frac{B}{DIR - A} \right]$$

For purposes of this formula the symbols shall be defined as follows:

“A” is the number of accrued days from the beginning of the interest payment period to the settlement date (computed in accordance with the provisions of section (e) below);

“B” is the number of days in the year (computed in accordance with the provisions of section (e) below);

“DIR” is the number of days from the issue date to the redemption date (computed in accordance with the provisions of section (e) below);

“P” is the dollar price of the security for each \$100 par value (divided by 100);

“R” is the annual interest rate (expressed as a decimal);

“RV” is the redemption value of the security per \$100 par value (divided by 100); and

“Y” is the yield on the investment if the security is held to redemption (expressed as a decimal).

(B) *Securities with Periodic Interest Payments.* The yield of a transaction in a security with periodic interest payments shall be computed as follows:

(1) for securities with one coupon period or less to redemption, the following formula shall be used:

$$Y = \left[ \frac{\left( \frac{RV}{100} + \frac{R}{M} \right) - \left( P + \left( \frac{A \cdot R}{E \cdot M} \right) \right)}{P + \left( \frac{A \cdot R}{E \cdot M} \right)} \right] \cdot \left[ \frac{M \cdot E}{E - A} \right]$$

For purposes of this formula the symbols shall be defined as follows:

“A” is the number of accrued days from the beginning of the interest payment period to the settlement date (computed in accordance with the provisions of section (e) below);

“E” is the number of days in the interest payment period in which the settlement date falls (computed in accordance with the provisions of section (e) below);

“M” is the number of interest payment periods per year standard for the security involved in the transaction;

“P” is the dollar price of the security for each \$100 par value (divided by 100);

“R” is the annual interest rate (expressed as decimal);

“RV” is the redemption value of the security per \$100 par value; and

“Y” is the yield on the investment if the security is held to redemption (expressed as a decimal).

(2) for securities with more than one coupon period to redemption, the formula set forth in item (2) of subparagraph (b)(i)(B) shall be used.

(c) *Discounted Securities.*

(i) *Dollar Price.* For transactions in discounted securities, the dollar price shall be computed in accordance with the following provisions:

(A) The dollar price of a discounted security, other than a discounted security traded on a yield-equivalent basis, shall be computed in accordance with the following formula:

$$P = [RV] - \left[ DR \cdot RV \cdot \frac{DSM}{B} \right]$$

For purposes of this formula the symbols shall be defined as follows:

“B” is the number of days in the year (computed in accordance with the provisions of section (e) below);

“DR” is the discount rate (expressed as a decimal);

“DSM” is the number of days from the settlement date of the transaction to the maturity date (computed in accordance with the provisions of section (e) below);

“P” is the dollar price of the security for each \$100 par value; and “RV” is the redemption value of the security per \$100 par value.

(B) The dollar price of a discounted security traded on a yield-equivalent basis shall be computed in accordance with the formula set forth in subparagraph (b)(i)(A).

(ii) *Return on Investment.* The return on investment for a discounted security shall be computed in accordance with the following provisions:

(A) The return on investment for a discounted security, other than a discounted security traded on a yield-equivalent basis, shall be computed in accordance with the following formula:

$$IR = \left[ \frac{RV - P}{P} \right] \cdot \left[ \frac{B}{DSM} \right]$$

For purposes of this formula the symbols shall be defined as follows:

“B” is the number of days in the year (computed in accordance with the provisions of section (e) below);

“DSM” is the number of days from the settlement date of the transaction to the maturity date (computed in accordance with the provisions of section (e) below);

“IR” is the annual return on investment if the security is held to maturity (expressed as a decimal);

“P” is the dollar price of the security for each \$100 par value; and

“RV” is the redemption value of the security per \$100 par value.

(B) The yield of a discounted security traded on a yield-equivalent basis shall be computed in accordance with the formula set forth in subparagraph (b)(ii)(A).

(d) *Standards of Accuracy; Truncation.*

(i) *Intermediate Values.* All values used in computations of accrued interest, yield, and dollar price shall be computed to not less than ten decimal places.

(ii) *Results of Computations.* Results of computations shall be presented in accordance with the following:

(A) Accrued interest shall be truncated to three decimal places, and rounded to two decimal places immediately prior to presentation of total accrued interest amount on the confirmation;

(B) Dollar prices shall be truncated to three decimal places immediately prior to presentation of dollar price on the confirmation and computation of extended principal; and

(C) Yields shall be truncated to four decimal places, and rounded to three decimal places, provided, however, that for purposes of confirmation display as required under rule G-15(a) yields accurate to the nearest .05 percentage points shall be deemed satisfactory.

Numbers shall be rounded, where required, in the following manner: if the last digit after truncation is five or above, the preceding digit shall be increased to the next highest number, and the last digit shall be discarded.

(e) *Day Counting.*

(i) *Day Count Basis.* Computations under the requirements of this rule shall be made on the basis of a thirty-day month and a three-hundred-sixty-day year, or, in the case of computations on securities paying interest solely at redemption, on the day count basis selected by the issuer of the securities.

(ii) *Day Count Formula.* For purposes of this rule, computations of day counts on the basis of a thirty-day month and a three-hundred-sixty-day year shall be made in accordance with the following formula.

$$\text{Number of Days} = (Y2 - Y1) 360 + (M2 - M1) 30 + (D2 - D1)$$

For purposes of this formula the symbols shall be defined as follows:

“M1” is the month of the date on which the computation period begins;

“D1” is the day of the date on which the computation period begins;

“Y1” is the year of the date on which the computation period begins;

“M2” is the month of the date on which the computation period ends;

“D2” is the day of the date on which the computation period ends; and

“Y2” is the year of the date on which the computation period ends.

For purposes of this formula, if the symbol “D2” has a value of “31,” and the symbol “D1” has a value of “30” or “31,” the value of the symbol “D2” shall be changed to “30.” If the symbol “D1” has a value of “31,” the value of the symbol “D1” shall be changed to “30.” For purposes of this rule time periods shall be computed to include the day specified in the rule for the beginning of the period but not to include the day specified for the end of the period.

## Rule G-33 Interpretations

### **Notice on Recently Effective Changes in Calculations Rule**

May 31, 1984

The Municipal Securities Rulemaking Board has recently received a number of inquiries from members of the municipal securities industry and others concerning certain of the provisions of rule G-33 on calculations. In particular, such persons have inquired concerning the acceptability under the rule of the practice of interpolation as a method of determining dollar price from yield. Such persons have also asked whether the rule permits a dealer effecting a transaction at a yield price equal to the interest rate on the securities to presume that the dollar price on the transaction is “100.”

The Board wishes to remind members of the industry that both of these practices are no longer permissible. Board rule G-33 generally requires that yields and dollar prices on transactions effected by municipal securities brokers and dealers be computed in accordance with the formulas prescribed in the rule directly to the settlement date of the transaction. Subparagraph (b)(i)(C) of the rule permitted, until January 1, 1984, the use of the dollar price “100” as the presumed result on transactions in securities with a redemption value of par effected at a yield price equal to the interest rate on the securities. Subparagraph (b)(i)(D) of the rule permitted, until January 1, 1984, the use of interpolation as a method of deriving a dollar price. Since the effectiveness of both of these provisions lapsed as of January 1, 1984, therefore, these practices are no longer in compliance with the requirements of the rule; dollar prices on all transactions effected on a yield basis (including transactions effected on a yield basis equal to the interest rate) should therefore be computed directly to the settlement date of the transaction.

The Board notes that the rule continues to permit a municipal securities broker or dealer to effect a transaction in dollar price terms. Therefore, a dealer wishing to offer or sell a security at par may continue to effect the transaction on a direct dollar price basis at a price of “100.”

### **Notice of Interpretation Concerning Price Calculation for Securities with an Initial Non-Interest Paying Period: Rule G-33**

August 25, 1986

The Board has adopted a method for calculating the price of securities for which there are no scheduled interest payments for an initial period, generally for several years, after which periodic interest payments are scheduled. These securities, known by such names as “Growth and Income Securities,” and “Capital Appreciation/Future Income Securities,” function essentially as “zero coupon” securities for a period of time after issuance, accruing interest which is payable only

upon redemption. On a certain date after issuance (“the interest commencement date”), the securities begin to accrue interest for semi-annual payment.

In March 1986, the Board published for comment a proposed method of calculating price from yield for such securities.<sup>1</sup> The Board received five comments on the proposed method, four expressing support for the method and one expressing no opinion. The commentators generally noted that the proposed method appeared to be accurate and could be used on bond calculators commonly available in the industry. The Board has adopted the proposed method of calculation, set forth below, as an interpretation of rule G-33 on calculations.

The general formula for calculating the price of securities with periodic interest payments is contained in rule G-33(b)(i)(B)(2). For securities with periodic payments, but with an initial non-interest paying period, this formula also is used.<sup>2</sup> For settlement dates occurring prior to the interest commencement date the price is computed by means of the following two-step process. First, a hypothetical price of the securities at the interest commencement date is calculated using the interest commencement date as the hypothetical settlement date,<sup>3</sup> the interest rate (“R” in the formula) for the securities during the interest payment period and the yield (“Y” in the formula) at which the securities are sold. This hypothetical price is computed to not less than six decimal places, and then is used as the redemption value (“RV” in the formula) in a second calculation using the G-33(b)(i)(B)(2) formula, with the interest commencement date as the redemption date, the actual settlement date for the transaction as the settlement date, and a value of zero for R, the interest rate. The resultant price, using the formula in G-33(b)(i)(B)(2), is the correct price of the securities.<sup>4</sup>

The price of such securities for settlement dates occurring after the interest commencement date, of course, should be calculated as for any other securities with periodic interest payments.<sup>5</sup>

<sup>1</sup> *MSRB Reports*, Vol. 6, No. 2 (March 1986) at 13.

<sup>2</sup> This interpretation is not meant to apply to securities which have a long first coupon period, but which otherwise are periodic interest paying securities.

<sup>3</sup> For settlement dates less than 6 months to the hypothetical redemption date, the formula in rule G-33(b)(ii)(B)(1) should be used in lieu of the formula in rule G-33(b)(ii)(B)(2).

<sup>4</sup> Rule G-12(c)(v)(I) and G-15(a)(i)(I) [currently codified at rule G-15(a)(i)(A)(5)(c)] require that securities be priced to the lowest of price to call, price-to-par option, or price to maturity. Thus, the redemption date used for this calculation method should be the date of an “in whole” refunding call if this would result in a lower dollar price than a computation to maturity.

<sup>5</sup> The formula in G-33(b)(i)(B)(1) should be used for calculations in which settlement date is 6 months or less to redemption date.

### **Interpretive Notice on Rule G-33 on Calculations for Securities with Periodic Interest Payments**

February 23, 2016

Rule G-33 generally requires that brokers, dealers, and municipal securities dealers (“dealers”) effecting transactions in municipal securities compute yields and dollar prices in accordance with the formulas prescribed.

Prior to an amendment effective February 23, 2016, Rule G-33(b)(i)(B)(2) and, by reference, (b)(ii)(B)(2), provided that, for interest-bearing municipal securities with periodic interest payments and more than six months to redemption, dealers compute the dollar price or yield using a formula that accounted for the present value of all future coupon payments and a semi-annual payment of interest. The formula in Rule G-33(b)(i)(B)(2) now provides a more precise pricing calculation when computing yields and dollar prices on securities with periodic interest payments and more than one coupon payment to redemption. Under the amended pricing formula, rather than presuming a semi-annual interest payment, the formula requires factoring in the actual interest payment frequency of the security (*e.g.*, monthly, quarterly or annually).

The compliance date for Rule G-33, as amended, is July 18, 2016.

Prior to July 18, 2016, a dealer will be deemed to be in compliance with Rules G-33(b)(i)(B)(2) and G-33(b)(ii)(B)(2) if calculating dollar price or yield for interest-bearing municipal securities with periodic interest payments and more than six months to redemption using the actual interest payment frequency rather than assuming a semi-annual payment. Beginning July 18, 2016, the compliance date for Rule G-33, as amended, all dealers will be required to factor in the actual interest payment frequency in calculating dollar price and yield for such securities.

See also:

**Rule G-17 Interpretation — Transactions in Municipal Securities with Non-Standard Features Affecting Price/Yield Calculations**, June 12, 1995.

### **Interpretive Letters**

#### **Day counting: securities dated on the 15th of a month.**

I am writing in response to your letter of May 26, 1982 in which you inquire as to the correct day count for calculation purposes on a security which is dated on the 15th of a month and pays interest on the first of a following month. In your letter you pose the example of a security dated on June 15, 1982 and paying interest on July 1, 1982, and you inquire whether the July 1, 1982 coupon on such security should have a value of 15 or 16 days of accrued interest.

As you know, Board rule G-33 provides the following formula for use on computations of day counts on securities calculated on a “30/360” day basis:

$$\text{Number of days} = (\text{Y2} - \text{Y1}) 360 + (\text{M2} - \text{M1}) 30 + (\text{D2} - \text{D1})$$

In this formula, the variables “Y1,” “M1,” and “D1” are defined as the year, month, and day, respectively, of the date on which the computation period begins (June 15, 1982, in your

example), and “Y2,” “M2,” and “D2” as the year, month, and day of the date on which the computation period ends (July 1, 1982, in your example). In the situation you present, therefore, the number of days in the period would correctly be computed as follows:

$$\begin{aligned} \text{Number of days} &= (1982 - 1982) 360 + (7 - 6) 30 + (1 - 15) \\ &\text{or} \\ \text{Number of days} &= (0) 360 + (1) 30 + (- 14) \\ &\text{or} \\ \text{Number of days} &= 0 + 30 + (- 14) \\ &\text{or} \\ \text{Number of days} &= 16 \text{ days} \end{aligned}$$

If figured correctly, therefore, the coupon for such a period should have a value of 16 days of accrued interest. If the coupon is for a longer period of time, this particular portion of that longer period would still correctly be counted as 16 days (*e.g.*, the day count on a coupon for the period June 15 to September 1 would correctly be figured as 76 days, consisting of 16 days for the period June 15 to July 1, and 30 days each for the months of July and August).

The error of computing the day count for such a period as 15 days apparently arises from an assumption that, on a security dated on the 15th of a month, accrued interest is owed only for the “second half” of that month. In reality, of course, the 15th of a month is not the first day of the “second half” of that month, but rather is the last day of the “first half” of that month (since a 30-day month consists of two 15-day half-months, the first half being from the 1st to the 15th, and the second half being from the 16th to the 30th). Again, it can clearly be seen that the correct day count for such a period is 16 days. *MSRB interpretation of June 2, 1982.*

**Day counting: day counts on notes.** As I indicated in my letter of October 4, your September 27 letter regarding the inclusion on a customer confirmation of information with respect to the day count method used on a transaction was referred to the Board for its consideration at the December meeting. In your letter you noted that Board rule G-33 on calculations requires that

[c]omputations under the requirements of [the] rule shall be made on the basis of a thirty-day month and a three-hundred-sixty-day year, or, in the case of computations on securities paying interest solely at redemption, on the day count basis selected by the issuer of the securities.

You indicated that your bank has recently experienced problems with transactions in municipal notes (“securities paying interest solely at redemption”) on which the issuer has selected a day count basis other than the traditional “30/360” basis, with the problems resulting from one party to the transaction using an incorrect day count method. You suggested that this type of problem could be partially alleviated by requiring that



a municipal securities dealer selling a security on which an unusual day count method is used specify the day count method on the confirmation of the transaction.

The Board shares your concern that a failure to identify the day count method used on a particular security may subsequently cause problems in completing a transaction. Therefore, the Board believes that the parties to a transaction should exchange information at the time of trade concerning any unusual day count method used on the securities involved in the transaction. Since the party selling the securities is more likely to be aware of the unusual day count, it would be desirable that sellers take steps to ensure that they advise the contra-parties on transactions of the method to be used.

The Board does not, however, believe that it would be appropriate to require that this information be stated on the confirmation. The Board reached this determination based on its perception that the space available on the confirmation for the details of the securities description is quite limited and its belief that information regarding the day count method may not be sufficiently material to warrant its inclusion in the securities description. *MSRB interpretation of December 9, 1982.*

**Use of formulas: annual interest securities.** I am writing in response to your letter of June 1, 1983 regarding the appropriate method of calculating yield and dollar price on periodic-interest municipal securities which pay interest on an annual, rather than the more customary semiannual, basis. You note in your letter that Board rule G-33 requires the use for purposes of computations of yield and dollar price on such securities of a formula which presumes semi-annual payment of interest (*i.e.*, that formula set forth in subparagraph (b)(i)(B)(2) of the rule). You suggest that the rule should be amended to require the use of a formula that recognizes the annual interest payment cycle on the securities.

As I indicated to you in our previous telephone conversation on this subject, the industry has traditionally disregarded the unusual nature of the interest payment cycle on these securities when computing yields and dollar prices on them, and has followed the practice of using the standard formula for computing yield and dollar price on a security paying interest on a semi-annual basis for these purposes. As a result of this traditional practice, all of the calculators presently available for use by industry members when computing yields and dollar prices have been designed in accordance with the assumption that all periodic-interest municipal securities pay interest on a semi-annual basis; these calculator models cannot be used to compute yields and dollar prices on such securities on any other basis. Therefore, the adoption of a requirement that yields and dollar prices on securities which pay interest on an annual basis be computed by means of a formula which recognizes the annual nature of the interest payment cycle, such as you suggest, would render all of the existing calculator models obsolete, and require that all industry members incur the cost of purchasing new calculator equipment capable of performing such computations (equipment which does not, to my knowledge, exist as of yet).

It is because of the substantial compliance expense that would have been imposed on the industry that the Board declined to adopt a requirement such as you suggest at the time rule G-33 was promulgated, even though it recognized that the requirement that was adopted mandated the use of a formula that would produce slightly less accurate results. *MSRB interpretation of June 6, 1983.*

#### **Rule G-33 Amendment History (since 2003)**

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[Release No. 34-77316 \(March 8, 2016\), 81 FR 13426 \(March 14, 2016\)](#); [MSRB Notice 2016-08 \(February 23, 2016\)](#)

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**Rule G-34**

**CUSIP Numbers, New Issue, and Market Information Requirements**

(a) *New Issue Securities.*

(i) *Assignment and Affixture of CUSIP Numbers.*

(A) Except as otherwise provided in this section (a) and section (d), a broker, dealer or municipal securities dealer acting as an underwriter in a new issue of municipal securities, and a municipal advisor advising the issuer with respect to a competitive sale of a new issue of municipal securities, shall apply in writing to the Board or its designee for assignment of a CUSIP number or numbers to such new issue, as follows:

(1) The underwriter in a negotiated sale shall make an application by no later than the time that pricing information for the issue is finalized. Such application for CUSIP number assignment shall be made at a time sufficient to ensure final CUSIP number assignment occurs prior to the formal award of the issue.

(2) The underwriter in a competitive sale for which no CUSIP numbers have been pre-assigned shall make an application immediately after receiving notification of the award from the issuer. The underwriter in a competitive sale shall ensure that CUSIP numbers are assigned prior to disseminating the Time of First Execution required under paragraph (a)(ii)(C) of this Rule G-34.

(3) A municipal advisor advising the issuer with respect to a competitive sale of a new issue of municipal securities shall make an application by no later than one business day after dissemination of a notice of sale or other such request for bids. Such application for CUSIP number assignment shall be made at a time sufficient to ensure final CUSIP number assignment occurs prior to the award of the issue.

(4) In making applications for CUSIP number assignment, the following information shall be provided:

(a) complete name of issue and series designation, if any;

(b) interest rate(s) and maturity date(s) (*provided, however*, that, if the interest rate is not established at the time of application, it may be provided at such time as it becomes available);

(c) dated date;

(d) type of issue (e.g., general obligation, limited tax or revenue);

(e) type of revenue, if the issue is a revenue issue;

(f) details of all redemption provisions;

(g) the name of any company or other person in addition to the issuer obligated, directly or indirectly, with respect to the debt service on all or part of the issue (and, if part of the issue, an indication of which part); and

(h) any distinction(s) in the security or source of payment of the debt service on the issue, and an indication of the part(s) of the issue to which such distinction(s) relate.

(5) Any changes to information identified in subparagraph (a)(i)(A)(4) and included in an application for CUSIP number assignment shall be provided to the Board or its designee as soon as they are known but no later than a time sufficient to ensure final CUSIP number assignment occurs prior to disseminating the time of first execution required under subparagraph (a)(ii)(C)(1)(b) of this Rule G-34.

(B) The information required by subparagraph (i)(A)(4) of this section (a) shall be provided in accordance with the provisions of this paragraph. The application shall include a copy of a notice of sale, official statement, legal opinion, or other similar documentation prepared by or on behalf of the issuer, or portions of such documentation, reflecting the information required by subparagraph (i)(A)(4) of this section (a). Such documentation may be submitted in preliminary form if no final documentation is available at the time of application. In such event the final documentation, or the relevant portions of such documentation, reflecting any changes in the information required by subparagraph (i)(A)(4) of this section (a) shall be submitted when such documentation becomes available. If no such documentation, whether in preliminary or final form, is available at the time application for CUSIP number assignment is made, such copy shall be provided promptly after the documentation becomes available.

(C) The provisions of subsection (i) of this section (a) shall not apply with respect to any new issue of municipal securities on which the issuer or a person acting on behalf of the issuer has submitted an application for assignment of a CUSIP number or numbers.

(D) In the event that the proceeds of the new issue will be used, in whole or in part, to refund an outstanding issue or issues of municipal securities in such a way that part but not all of the outstanding issue or issues previously assigned a single CUSIP number is to be refunded to one or more redemption date(s) and price(s) (or all of an outstanding issue is to be refunded to more than one redemption date and price), the broker, dealer or municipal securities dealer shall apply in writing to the Board or its designee for a reassignment of a CUSIP number to each part of the outstanding issue refunded to a particular