

# MSRB REPORTS

Volume 1, Number 3

Municipal Securities Rulemaking Board

September 1981

## From the Chairman

Another year of the municipal securities industry living with self-imposed regulations has passed. A non-event. Where once the issue of self-regulation was cause for arm waving soap-box oratory, the then prevailing moods of fear and anger have now given way to tolerant annoyance and irritation.

While not lovingly embraced, the municipal industry has nonetheless taken to the process of self regulation. Most of the rules imposed by the MSRB were merely a codification of existing practices. The controversial rules were those which were a change from current practice (the various G-11 changes) or those in which a standard was being established that would eliminate regional differences (pricing).

For each of the proposed rules, the industry was encouraged to comment, criticize, or suggest improvements. It was not a school exercise; rather it was a forum in which, after the expression of the various view points were heard, decisions were made that would govern the conduct of business for the participants.

We are now at that juncture where the codification process is behind us. Subsequent rules as they develop will be those that will move us into uncharted waters. As a consequence, the rule writing process should consider with each new rule or rule change the following:

- 1) Is there a demonstrated need for it, and
- 2) Is the redressing of one inequity going to cause new inequities?

This means that a proposed rule should be rooted to a real and demonstrated need; that the need can justify the subsequent onslaught of amendments and rule interpretations that will surely follow as initial misunderstandings and changed circumstances develop.

The MSRB has tried to follow this precept. If it has not always been clear of sight, the industry has been quick to point out the fuzziness of vision. More than ever, this watchfulness is going to be needed in the coming years. Tolerant annoyance must not be allowed to drift into bored somnolence. After all it is still your industry.

**Albert F. Blaylock**  
MSRB Chairman 1980-81

Senior Vice President  
First Interstate Bank of California

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- **Rule G-33**  
**Proposed Rule on Calculations Filed**

### October 1981

- Pending —start-up date for the General Securities Sales Supervisor Examination (Test Series 8)
- SEC approval of rule G-6 amendment on fidelity bonding
- SEC approval of rule G-12 amendments facilitating clearing through registered clearing agencies
- SEC approval of rule G-12 amendment to reclamation provisions
- SEC approval of rule G-12 amendment to shorten verification procedure deadline
- SEC approval of proposed rule G-33 on calculations





**Route To:**

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# Rule G-15

## Yield Disclosure Requirements

**Q:** What changes to Board rules are scheduled to become effective on October 1, 1981?

**A:** An amendment to Board rule G-15 on customer confirmations becomes effective on that date. This amendment requires that, with respect to a transaction in callable securities effected at a dollar price above par ("100"), the confirmation of such a transaction sent to the customer must state the lowest of the yield to a premium call, the yield to the par option, or the yield to maturity resulting from the dollar price.

**Q:** For what other types of transactions must the customer confirmation set forth the yield?

**A:** As of October 1, all customer confirmations, except for confirmations of transactions at par ("100"), must state a yield. Confirmations of transactions effected at yield prices must state the yield price; confirmations of transactions effected at dollar prices must state the lowest of the yield to premium call, yield to par option, or yield to maturity resulting from the dollar price.

**Q:** Does this apply to confirmations of purchases from customers?

**A:** Yes. As of October 1, all confirmations sent to customers, both for purchases and for sales, must state

yield information, except if the transaction is executed at par. [See interpretive notice on page 11 of this issue.]

**Q:** What premium call or par option feature should be used in this computation?

**A:** A yield to premium call or par option should be computed to the "in whole" call or option, *i.e.*, that under which the issuer has the right to call the whole of the particular maturity. In cases when the security has more than one "in whole" call feature, the "in whole" call feature which may be exercised in the event of a refunding should be used for computation purposes.

**Q:** Must all of the securities which are delivered on a transaction be identical with respect to this call feature?

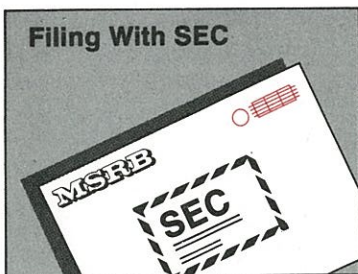
**A:** Yes. Securities which have the same issuer, coupon rate, and maturity date, but which are subject to different "in whole" call provisions, are not fungible (interchangeable), and cannot be included together in a delivery on a single transaction. Such a delivery would be considered irregular for purposes of Board rule G-12(g).

**Q:** Is this true even in the event the securities are trading at a price substantially below par?

**A:** Yes. Regardless of the price of a particular transaction, the securities delivered on the transaction cannot differ with respect to the "in whole" call provisions.

**Q:** Is this true for inter-dealer transactions also?

**A:** Yes, it applies both to deliveries to customers and to deliveries to other dealers.



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# Rule G-6

## Proposed Amendment on Fidelity Bonding Filed

The Board filed with the Securities and Exchange Commission on September 1, 1981 a proposed amendment to rule G-6 on fidelity bonding. Rule G-6 currently specifies that municipal securities brokers and dealers (other than bank dealers) must maintain bonding coverage in accordance with the requirements of Article III, Section 32 of the Rules of Fair Practice of the National Association of Securities Dealers, Inc. (the "NASD"), if they are members of the NASD, or in accordance with Commission rule 15b10-11, if they are SECO broker/dealers, in both cases as such requirements were set forth on January 10, 1977. The proposed amendment deletes the reference in the rule to a specific date, thereby requiring municipal securities brokers and dealers to comply with either the NASD or the SECO requirements, whichever is appropriate, as they are currently in effect, and as they are from time to time amended. The Board believes that the inclusion of the date reference in rule G-6 may serve only to confuse municipal securities brokers and dealers as to the applicability of future changes to the respective fidelity bonding rules, and that municipal securities brokers and dealers should be complying with such changes at the time they are actually adopted. The Board believes that any subsequent changes in these requirements would be refinements, rather than substantive revisions of the basic require-

ments,\* and notes that, should substantive revisions be proposed, it would be able to consider the appropriateness of such revisions for municipal securities brokers and dealers at that time.

The proposed amendment will not become effective until approval by the Securities and Exchange Commission. The text of the proposed amendment is below.

### Text of Proposed Amendment\*\*

**Rule G-6. Fidelity Bonding**

No municipal securities broker or municipal securities dealer (other than a bank dealer) shall be qualified for purposes of rule G-2 unless such broker or dealer, if a member of a registered securities association, has met the fidelity bonding requirements set forth in the rules of such association, to the same extent as if such rules were applicable to such broker or dealer, or such broker or dealer, if not a member of a registered securities association, has met the fidelity bonding requirements set forth in rule 15b10-11 under the Act, to the same extent as if such rules were applicable to such broker or dealer, in each case as such requirements were set forth on January 10, 1977.

**Questions concerning the proposed amendment may be directed to Donald F. Donahue, Deputy Executive Director.**

\*The Board notes, for example, that the NASD adopted a technical amendment to its rule in July 1979 to correct an inequity in the annual review provisions as they apply to firms commencing their second year of business.

\*\*Material which is lined through would be deleted.





**Route To:**

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## Rule G-11

### Amendments to Syndicate Practice Rules Approved

On September 11, 1981 the Securities and Exchange Commission approved certain amendments to rule G-11 which significantly modify the current requirements. Rule G-11 prescribes terms and conditions for sales of new issue municipal securities during the underwriting period. **The amendments were approved for a delayed effective date of October 13, 1981.** The amendments will

- relieve municipal securities dealers who are not members of the syndicate of their obligation, under current provisions of rule G-11, to disclose whether orders submitted are for the account of their related portfolios;
- relieve syndicate managers of their obligation, under current provisions of rule G-11, to provide information to members about related portfolio and group orders to which securities have not been allocated;
- require that within 10 days from the date of sale the syndicate manager disclose to members in writing the following information concerning the allocation of securities:
  - the identify of members' related portfolios to which securities have been allocated as well as the aggregate par value and maturity date of each maturity so allocated;
  - the identity of each person submitting a group order to which securities have been allocated as well as the aggregate par value and maturity date of each maturity so allocated; and
  - a summary, by priority category, of the allocation of securities to other orders which, under the priority provisions adopted by the syndicate, were entitled to a higher priority than a member's "take down" order, including any order confirmed at a price other than the original list price, indicating the aggregate par value and maturity date of each maturity so allocated;\* and

- require that syndicate managers include in the settlement statement a summary showing the aggregate par values and prices (expressed in terms of dollar prices or yields) of all securities sold from the syndicate account.\*\*

**Questions or comments concerning the amendments should be directed to Richard B. Nesson, General Counsel.**

### Text of Amended Provisions\*\*\*

#### Rule G-11. Sales of New Issue Municipal Securities During the Underwriting Period

(a) Definitions. For purposes of this rule, the following terms have the following meanings:

(i) The term "accumulation account" means an account established in connection with a municipal securities investment trust to hold securities pending their deposit in such trust.

(ii) The term "date of sale" means, in the case of competitive sales, the date on which all bids for the purchase of securities must be submitted to an issuer, and, in the case of negotiated sales, the date on which the contract to purchase securities from an issuer is executed.

(iii) The term "group order" means an order for securities held in syndicate, which order is for the account of all members of the syndicate on a pro-rata basis in proportion to their respective participations in the syndicate. Any such order submitted directly to the senior syndicate manager will, for purposes of this rule, be deemed to be the submission of such order by such manager to the syndicate.

\*The Board notes that syndicate managers normally send out to syndicate members shortly after the date of sale a "release letter" which confirms the terms of the syndicate and the members' respective participations. The Board suggests that the allocation disclosure could be incorporated easily into such "release letters." An example of a "release letter" containing such disclosure is attached as Exhibit A.

\*\*An example of a settlement statement containing such a summary is attached as Exhibit B.

\*\*\*Underlining indicates new language; the portions of the previous existing rule which were deleted by the amendments are not included in the text presented here.



(iv) The term "municipal securities investment trust" means a unit investment trust, as defined in the Investment Company Act of 1940, the portfolio of which consists in whole or in part of municipal securities.

(v) The term "order period" means the period of time, if any, announced by a syndicate during which orders will be solicited for the purchase of securities held in syndicate.

(vi) The term "priority provisions" means the provisions adopted by a syndicate governing the allocation of securities to different categories of orders.

(vii) The term "related portfolio," when used with respect to a municipal securities dealer, means a municipal securities investment portfolio of such municipal securities dealer or of any person directly or indirectly controlling, controlled by or under common control with such municipal securities dealer.

(viii) The term "syndicate" means an account formed by two or more persons for the purpose of purchasing, directly or indirectly, all or any part of a new issue of municipal securities from the issuer, and making a distribution thereof.

(ix) The term "underwriting period" means the period commencing with the first submission to a syndicate of an order for the purchase of new issue municipal securities or the purchase of such securities from the issuer, whichever first occurs, and ending at such time as the issuer delivers the securities to the syndicate or the syndicate no longer retains an unsold balance of securities, whichever last occurs.

(b) Disclosure of Capacity. Every municipal securities dealer which is a member of a syndicate that submits an order to a syndicate or to a member of a syndicate for the purchase of municipal securities held by the syndicate shall disclose at the time of submission of such order if the securities are being purchased for its dealer account, for the account of a related portfolio of such municipal securities dealer, for a municipal securities investment trust sponsored by such municipal securities dealer, or for an accumulation account established in connection with such a municipal securities investment trust.

(c) No change.

(d) Disclosure of Group Orders. Every municipal securities dealer that submits a group order to a syndicate or to a member of a syndicate, shall disclose at the time of submission of such order the identity of the person for whom the order is submitted.

(e) Priority Provisions. Every syndicate shall establish priority provisions and, if such priority provisions may be changed, the procedure for making changes. For purposes of this rule, the requirement to establish priority provisions shall not be satisfied if a syndicate provides only that the syndicate manager or managers may determine in the manager's or managers' discretion the priority to be accorded different types of orders. Notwithstanding the preceding sentence, a syndicate may include a provision permitting the syndicate manager or managers on a case-by-case basis to allocate securities in a manner other than in accordance with the priority provisions, if the syndicate manager or managers determine in its or their discretion that it is in the best interests of the syndicate. In the event any such allocation is made, the syndicate manager or managers shall have the burden of justifying that such allocation was in the best interests of the syndicate.

(f) Communications Relating to Priority Provisions and Order Period. Prior to the first offer of any securities by a syndicate, the senior syndicate manager shall furnish in writing to the other members of the syndicate (i) the priority provisions, (ii) the procedure, if any, by which such priority provisions may be changed, (iii) if the senior syndicate manager or managers are to be permitted on a case-by-case basis to allocate securities in priority provisions, the fact that they are to be permitted to do so, and (iv) if there is to be an order period, whether orders may be confirmed prior to the end of the order period. Any change in the priority provisions shall be promptly furnished in writing by the senior syndicate manager to the other members of the syndicate. Syndicate members shall promptly furnish in writing the information described in this section to others, upon request.

(g) Disclosure of Allocation of Securities. The senior syndicate manager shall, within ten business days following the date of sale, disclose to the other members of the syndicate, in writing, the following information concerning the allocation of securities to orders submitted through the end of the order period or, if the syndicate does not have an order period, through the first business day following the date of sale:

(i) the identity of each related portfolio, municipal securities investment trust, or accumulation account referred to in section (b) above submitting an order to which securities have been allocated as well as the aggregate par value and maturity date of each maturity so allocated;

(ii) the identity of each person submitting a group order to which securities have been allocated as well as the aggregate par value and maturity date of each maturity so allocated; and

(iii) a summary, by priority category, of the allocation of securities to other orders which, under the priority provisions, were entitled to a higher priority than a member's "take down" order, including any order confirmed at a price other than the original list price, indicating the aggregate par value and maturity date of each maturity so allocated.

(h) Disclosure of Syndicate Expenses and Other Information. At or before the final settlement of a syndicate account, the senior syndicate manager shall furnish to the other members of the syndicate:

(i) an itemized statement setting forth the nature and amounts of all actual expenses incurred on behalf of the syndicate. Notwithstanding the foregoing, any such statement may include an item for miscellaneous expenses, provided that the amount shown under such item is not disproportionately large in relation to other items of expense shown on the statement and includes only minor items of expense which cannot be easily categorized elsewhere in the statement. Discretionary fees for clearance costs to be imposed by a syndicate manager and management fees shall be disclosed to syndicate members prior to the submission of a bid, in the case of a competitive sale, or prior to the execution of a purchase contract with the issuer, in the case of a negotiated sale. For purposes of this section, the term "management fees" shall include, in addition to amounts categorized as management fees by the syndicate manager, any amount to be realized by a syndicate manager and not shared with the other members of the syndicate, which is attributable to the difference in price to be paid to an issuer



for the purchase of a new issue of municipal securities and the price at which such securities are to be delivered by the syndicate manager to the members of the syndicate; and

(ii) a summary statement showing the aggregate par values and prices (expressed in terms of dollar prices or yields) of all securities sold from the syndicate account.

**EXHIBIT A**

Dealer B  
Dealer C  
Bank D  
Bank E

**Re: \$5,725,000 Gotham City G.O. Bonds**

Account Members:

Our account has purchased the above issue at a net interest rate of 7.3104%. Coupon rates are 7.50% in 1982/84; 7.00% in 1985/90; 6.60% in 1991; 6.75% in 1992; 6.90% in 1993; 7.00% in 1994; 7.10% in 1995; 7.25% in 1996; 7.40% in 1997; 7.60% in 1998; 7.75% in 1999; 6.90% in 2000; and 8.00% in 2001. Our purchase price is 100.00. Gotham National Bank was named paying agent for the issue.

Our gross profit is approximately \$19.90 per bond. The account's expenses will include a 40 cents per bond clearance fee. The account is undivided as to liability and as to selling. Take-downs and concessions are as follows:

Maturity	Take-down	Concession
1982/88	3/4	1/4
1989/94	7/8	3/8
1995/01	1	1/2

[Disclosure of Allocations to Group and Related Portfolio Orders—Rule G-11 (g) (i) and (ii)]

For joint account benefit, the bonds due in 1982 were sold to Gotham City Bank and Trust at original list net; bonds in 1986 were sold to Gotham Insurance Corp. at original list less 1/4% and \$200,000 bonds in 1989 were sold to Dealer C Bond Fund at original list less 3/8%.

The bonds in 1995 through 2001 were sold to the Gotham Casualty Company at adjusted yields of 7.40%, 7.50%, 7.60%, 7.70%, 7.80%, 7.90%, 8.00%, consecutively, which represents an average dollar price of 98.815.

[Disclosure of Allocation, by Priority Category, to Other Orders—Rule G-11 (g) (iii)]

Two blocks of bonds due in 1983, one of \$100,000 and the other of \$160,000, as well as all the bonds due in 1984 were taken out of the account at original list, with the concessions designated to certain account members. We deposited a check in the amount of \$57,250.00 with the bid and will charge the account at the prime interest rate on this amount for the period it is outstanding.

It is a pleasure to be associated with you in this underwriting.

Very truly yours,

Public Finance Department  
Dealer A



**EXHIBIT B**

**\$5,725,000**  
**GOTHAM CITY GENERAL OBLIGATION BONDS**

Proceeds from Sale of Bonds	\$ x,xxx,xxx
Cost of Bonds	<u>5,725,000.</u>
Gross Profit	\$ xx,xxx

Expenses

\$ \_\_\_\_\_

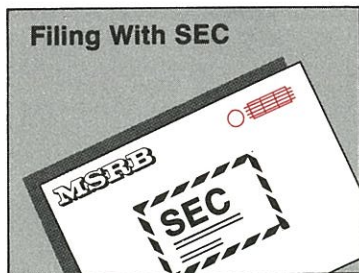
\$xx,xxx

Syndicate Members	Participation	
Dealer A	\$1,145,000	\$ x,xxx
Dealer B	1,145,000	x,xxx
Dealer C	1,145,000	x,xxx
Bank D	1,145,000	x,xxx
Bank E	<u>1,145,000</u>	<u>x,xxx</u>
	\$5,725,000	\$xx,xxx

[Syndicate Accounting Information—rule G-11 (h) (ii)]  
Bonds Were Sold From the Account as Follows:

- 280,000 at original list net
- 760,000 at original list less 1/4%
- 200,000 at original list less 3/8%
- 620,000 at original list less 3/4%
- 200,000 at down .10 less 3/4%
- 1,490,000 at original list less 7/8%
- 2,075,000 at 98.815





**Route To:**

- Manager, Muni. Dept.
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# Rule G-12

## Proposed Amendment Filed

### Verification Procedure Deadline Shortened

The Board filed with the Securities and Exchange Commission on August 27, 1981 a proposed change to a previously-filed amendment to the verification procedures set forth in paragraph (d) of rule G-12 regarding uniform practice. The amendment would shorten the deadline by which a dealer must initiate the verification procedures from the formerly proposed eleven business days following the trade date to eight business days following the trade date.

The Board is amending the previously-proposed deadline as a result of its reconsideration of the appropriateness of the eleven business day time limit in light of comments received on the change and concerns expressed by the Commission staff. The newly-proposed eight business day time limit was established by the Board after consideration of the results of an informal survey conducted by the Board, as well as the experience of individual Board members' firms and banks with the current rule. Both of these factors supported, in the Board's view, an eight business day time limit.

The text of the proposed amendment, as modified by this change, is below.

### Text of Amendment\*

#### Rule G-12. Uniform Practice

- (a) through (c) No change.
- (d) Comparison and Verification of Confirmations; Unrecognized Transactions

(i) and (ii) No change.

(iii) In the event a party has sent a confirmation of a transaction, but fails to receive a confirmation from the contra party or a notice indicating nonrecognition of the transaction, the confirming party shall, not earlier than the fourth business day following the trade date (the sixth business day following the trade date, in the case of an initial confirmation of a transaction effected on a "when, as, and if issued" basis) nor later than the eleventh ~~eleventh~~ business day following the trade date, seek to ascertain whether a trade occurred. If, after such verification, such party believes that a trade occurred, it shall immediately notify the non-confirming party by telephone to such effect and send within one business day thereafter, a written notice, return receipt requested, to the non-confirming party, indicating failure to confirm. Promptly following receipt of telephone notice from the confirming party, the non-confirming party shall seek to ascertain whether a trade occurred and the terms of the trade. In the event the non-confirming party determines that a trade occurred, it shall immediately notify the confirming party by telephone to such effect and, within one business day thereafter, send a written confirmation of the transaction to the confirming party. In the event a party cannot confirm the trade, such party shall promptly send a written notice, return receipt requested, to the confirming party, indicating non-recognition of the transaction.

(iv) through (viii) No change.

(e) through (l) No change.

**Questions concerning this notice may be addressed to Donald F. Donahue, Deputy Executive Director.**

\*The text reflects the proposed rule changes to rule G-12(d) as currently on file with the Commission. Underlining indicates new language; material which is lined through will be deleted.



**Route To:**

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## Rule G-15

### Interpretative Notice

#### **Yield Disclosure Requirements for Purchases from Customers Applies to Actual Unit Dollar Price**

Certain amendments to Board rule G-15 on customer confirmations became effective on December 1, 1980. Among other matters, these amendments require that customer confirmations of transactions effected on the basis of dollar price, including confirmations of purchases from customers, set forth certain yield information concerning the transaction. Confirmations of dollar price transactions in non-callable securities, or in callable securities traded at prices below par, must set forth the yield to maturity resulting from the dollar price. Confirmations of dollar price transactions in securities which have been called or prerefunded must show the yield to the maturity date established by the call or prerefunding. Confirmations of transactions in callable securities traded at dollar prices in excess of par are exempt from yield disclosure requirements until October 1, 1981; after that date such confirmations must show the lowest of the yield to pre-

mium call, yield to par option, or yield to maturity resulting from such dollar price.\*

Since the effective date of these amendments, the Board has received several inquiries as to whether all confirmations of purchases from customers, including purchases effected at a price derived from a yield price less a spread or concession, must show the yield resulting from the actual unit dollar price of the transaction.

**Questions concerning this notice and the amendments to rule G-15 may be addressed to Donald F. Donahue, Deputy Executive Director.**

The Board is of the view that all confirmations of purchases from customers (except for purchases at par) must set forth the net or effective yield resulting from the actual unit dollar price of the transaction. The yield disclosure on confirmations of purchases from customers is intended to provide customers with a means of assessing the merits of alternative investment strategies (such as different possible reinvestment transactions) and the merits of the particular transaction being confirmed. The Board believes that the disclosure of the net or effective yield (i.e., that derived from the actual unit dollar price of the transaction) best serves these purposes.

\* Confirmations of transactions effected at a dollar price of par ("100") continue to be exempt from any yield disclosure requirements.



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# Rule G-33

## Proposed Rule on Calculations Filed

The Board filed with the Securities and Exchange Commission on September 4, 1981 proposed rule G-33 on calculations. The proposed rule prescribes standard formulas for the computation of accrued interest, dollar price, and yield, as well as setting standards of accuracy for computations and establishing day counting methods. The standards of the proposed rule are essentially consistent with current industry practices; the proposed rule does, however, adopt changes to such practices for effectiveness on January 1, 1984. The text of the proposed rule follows this notice.

The Board has adopted proposed rule G-33 due to its belief that establishment of standard calculation methods would be an important and beneficial step for the municipal securities industry. Adoption of standard methods of performing these computations will ensure that customers will receive precise and consistent information regarding the yield and dollar price of their transactions, and will foster the further refinement and enhanced accuracy of these computations. Further, the adoption of standard calculation methods will lessen the likelihood of disagreements between parties to a transaction regarding interest and dollar price computations. It should also improve the clearance and processing procedures for municipal securities transactions by, among other matters, facilitating the comparison and delivery of securities.

### Background

Board rules G-12 and G-15 require that intra-industry and customer confirmations set forth certain information as to the yield and dollar price of a transaction. The rules also require that, with respect to transactions effected on the basis of a yield price, the dollar price must be calculated to the lowest of price to premium call, price to par option, or price to maturity; rule G-15, in certain circumstances, requires the computation of yields to these dates. Further, rule G-12 contains certain provisions relating to maximum permissible

money differences and computations of interest. Neither rule, however, contains any provision regarding the specific method of calculation of yields, dollar prices, or accrued interest amounts.

On August 15, 1980 the Board issued in exposure draft form a rule (the "draft rule") proposing to establish certain standards for industry calculation methods.\* The draft rule contained proposed formulas to be used for computations of accrued interest, dollar price, and yield, as well as proposed standards for the accuracy of calculations, the termination of computed values, and the day-count basis. The proposals contained in the draft rule were developed by the Board in response to comments from industry members that Board action to standardize calculation methods would be helpful. In preparing the draft rule, the Board had the invaluable help of its Ad Hoc Committee on Calculations, composed of industry experts on calculations matters.

In response to certain of the suggestions contained in the comment letters received on the August 1980 exposure draft the Board issued, on December 18, 1980, a second notice (the "solicitation")\*\* requesting further industry comment on certain of the issues raised by the original commentators. The solicitation also proposed the adoption of special formulas for securities priced on a discounted basis.

The Board received twenty-one letters of comment in response to the two notices. The Board is very gratified at the extent of the response, and also at the thorough and detailed consideration of the issues evident in the letters. The Board reviewed the suggestions of the commentators carefully, and adopted many of them in the proposed rule.

**Questions concerning the rule may be directed to Donald F. Donahue, Deputy Executive Director.**

### The Proposed Rule

The standards set forth in proposed rule G-33 are in most respects similar to those contained in the draft rule. As a result of its consideration of the comments received on the draft rule and the issues raised in the solicitation, however, the Board has significantly modified several of the proposals included in the draft rule. The principal provisions of proposed rule G-33 are as follows:

\*The August 15, 1980 exposure draft is reprinted in the CCH *Municipal Securities Rulemaking Board Manual*, ¶10,160 at 10,587.

\*\*The December 18, 1980 solicitation is reprinted in the CCH *Manual*, ¶10,170 at 10,611.



(1) The proposed rule sets forth a standard method for computing accrued interest on municipal securities transactions. The formula computes the time period for the accrual of interest as a fraction of the full year; the draft rule had proposed adoption of a slightly different formula, which would have computed the accrued interest in terms of a standard six-month coupon period. The Board adopted the approach reflected in the proposed rule in accordance with a suggestion made by one of the commentators, who indicated that this formula would be less confusing to use when accruing interest for short or long interest periods.

(2) Proposed rule G-33 sets forth standard formulas for computing dollar price and yield on municipal notes, municipal bonds with less than six months to maturity, municipal bonds with maturities longer than six months, and municipal securities priced on a discounted basis.\* The proposed rule change permits the use of dollar price interpolation until January 1, 1984, and also permits until January 1, 1984 the use of the dollar price "100," rather than the actual computed result of the formulas, for transactions where the yield price equals the coupon rate of the securities.

The draft rule had proposed that one basic formula (that prescribed in the proposed rule for municipal bonds with maturities of longer than six months) be used for all types of securities. While the use of different formulas for municipal notes and municipal bonds with less than six months to maturity has been traditional, the exposure draft discussion suggested that the use of a single formula, rather than a variety of formulas, would promote consistency and greater accuracy in computations of dollar price and yield. Further, the discussion noted that the formula contained in the draft rule was based on the compounding of interest (rather than on the simple interest method used in the traditional formulas for such short-term securities), and that use of a compounding formula would facilitate the comparison of municipal securities investments with other investment alternatives. The discussion pointed out, however, that the conversion to a compound-interest formula would generally cause a slight decrease in the dollar prices of the securities for which the simpler interest formula had previously been used.

In response to the draft rule several commentators observed that the decrease in the dollar price due to the conversion to a compound interest formula might well be significant, particularly in view of the large block size common to municipal note transactions, and the effect of even minimal dollar price changes on the yields of such short-term securities. The commentators also suggested that the investments with which such short-term securities were likely to be compared were typically valued in simple-interest formulas, and that it would be appropriate to continue to use a computation

method that is consistent with that used for these other securities. For these reasons the Board determined not to proceed with the draft rule's single-formula proposal, and has adopted the currently-used simple interest formulas for municipal notes and municipal bonds with less than six months to maturity. The proposed rule adopts the draft rule's formula for use for municipal bonds with maturities of longer than six months; the industry currently uses this formula for such securities.

The draft rule did not propose any formula for use on transactions in securities priced on a discounted basis; the solicitation proposed formulas for such securities. Proposed rule G-33 includes such formulas, and also special formulas appropriate for discounted securities traded on a yield-equivalent basis.

One commentator suggested that the term in the formulas which represents the accrued interest portion of the security's value should be expressed by the equation prescribed in the rule for the computation of accrued interest generally. The Board has determined to accept this suggestion.

The draft rule proposed that an exception to the use of the prescribed formula should be made in the case of a transaction priced at a yield price equal to the coupon rate of the securities involved; the draft rule proposed that in such cases the dollar price should be presumed to be "100." Several commentators pointed out that this assumed result is not accurate, particularly in the case of securities prerefunded to a premium call date, and suggested that the computed result should be used. The Board has determined to accept the suggestion of these commentators. Accordingly, the proposed rule requires that the more accurate computed result be used. However, in view of the fact that this represents a change to currently-accepted industry practice, and that existing calculator models are programmed to assume a dollar price of "100" on this particular computation, the Board believes that it would be appropriate to defer the effectiveness of this change to January 1, 1984.

The draft rule did not address the acceptability under the rule of the interpolative method of deriving a dollar price.\*\* Given the wide availability of computer and calculator equipment that is capable of computing a dollar price directly to the settlement date of a transaction, the Board does not believe that dollar price interpolation should continue to be acceptable indefinitely. The Board recognizes, however, that many of the calculators currently in use, as well as some dealers' confirmation processing programs, derive dollar prices through interpolation, and that reprogramming of such calculators and confirmation processing functions will be necessary; accordingly, proposed rule G-33 specified that dealers may continue to use interpolation to determine dollar

\*The proposed rule's formulas distinguish among (1) municipal securities paying interest at maturity (generally municipal notes), (2) municipal securities paying interest on a periodic basis (generally municipal coupon-bearing bonds), and (3) municipal securities trading on a discounted basis. Further, the formulas distinguish between periodic-interest municipal securities for which only the interest payment at maturity remains due (generally municipal bonds of less than six months to maturity) and periodic interest securities for which two or more interest payments remain due (generally bonds of maturities longer than six months).

For ease and clarity of reference this notice will discuss the formulas in terms of the securities to which they would normally apply.

\*\*The interpolative method derives the dollar price of a transaction in a particular security by establishing the dollar price values corresponding to the yield price of the transaction for specified dates (usually the month-end dates immediately before and after the settlement date) and interpolating between those values to determine the dollar price to the precise settlement date. For example, if the transaction involved 5% securities due on September 1, 1981, selling at a 9.00 yield price for settlement August 20, 1981, the interpolative method would determine the dollar price value for August 1, 1981 ("73.841") and September 1, 1981 ("73.894") and interpolate between them to arrive at the dollar price for a settlement of August 20 ("73.932").

Dealers using the interpolative method historically derived the monthly values from "basis books," which computed such values through the use of the formulas which the Board is prescribing. As computer technology was made available for confirmation processing it became possible to compute the dollar price directly to the settlement date, rather than approximating through the use of interpolation. A number of dealers, however, have chosen to include an interpolative function in their confirmation processing programs, so that they continue to derive dollar prices by means of interpolation (and, as a result, perform three dollar price computations in the course of generating confirmations, rather than only the one necessary computation directly to the settlement date).



prices until January 1, 1984. However, the Board intends to file shortly an amendment to rule G-12 specifying that, in the event of a money difference between a dealer using the interpolative method and a dealer calculating dollar price directly to the settlement date, the dealer using the direct pricing method shall be deemed to have the correct money amount.

(3) The proposed rule establishes standards of accuracy for computations, and prescribes "truncation" as the method of terminating computed numbers. The standards of accuracy conform to current industry practice or previous actions of the Board. The "truncation" method of terminating computed numbers has also been traditionally used in the industry.

The draft rule had proposed use of a "rounding" method, rather than truncation, to terminate computed numbers.\* The Board suggested that this would provide greater accuracy in computations on large block transactions. Several commentators objected to the change to rounding, noting that it would necessitate reprogramming and suggesting that the greater accuracy did not appear to justify the expense of the change. The Board has accepted their reasoning and adopted the traditional "truncation" method.

(4) The proposed rule provides that the standard "30/360" day count basis should be used for the computations under the rule, except in the case of municipal notes, in which case the day count basis selected by the issuer should be used; the proposed rule also prescribes a formula for day counting. The day count standard is as proposed in the draft rule. One of the commentators on the draft rule suggested that inclusion of a standard formula for computing a day count would be helpful; the Board has adopted this suggestion, and has included in the proposed rule the traditional day counting formula, together with specification of certain traditional assumptions on day counting for month-end dates.

(5) The proposed rule provides for a delayed effective date of six months following the approval of the proposed rule by the Commission, with the exception of the provisions concerning the use of interpolation and transactions at a yield price equal to the coupon rate discussed above. The Board is proposing a delay of six months to permit the municipal securities industry time to acquaint itself with the rule, and to provide time for the Board to publish and distribute material on the calculation methods. Since the formulas mandated under the proposed rule change are those viewed as standard in the industry, and produce results essentially consistent with all methods of computing dollar price and yield currently used by the industry, the Board does not believe that a delay in effectiveness of greater length is necessary.

### Other Calculations Issues

Several of the comment letters received in response to the August 1980 exposure draft suggested that the Board consider further changes to the industry's accepted calculation methods. Among other matters, these commentators sug-

gested that the Board consider (1) adopting an "actual/365" day count method, rather than the currently-used "30/360" method; (2) adopting a formula that accurately computes dollar price and yield for securities with "odd" first coupons (i.e., first coupons longer or shorter than six months); and (3) adopting a formula that is convertible on the same basis as the security pays interest (e.g., converting annually on annual-coupon securities). The Board requested additional industry comment on each of these specific questions in its December 1980 solicitation.

The Board has determined not to proceed at this time with any of these suggested changes. With respect to the suggestions regarding the convertibility of the formulas and the use of the formulas for "odd" coupon securities, the Board was advised that existing calculator models could not perform these specialized calculations, nor could they be easily modified to do so. Since adoption of these changes would render all existing calculators obsolete, the Board does not believe that these changes should be adopted at this time.

However, the Board shares the concern of the commentators that these inaccuracies in the industry's computational methods, although relatively minor, should at some time be corrected. The Board is advising the manufacturers of the calculator equipment generally used in the industry that it will revisit the question of yield and dollar price for these special types of securities, and intends to require the use of such formulas at some future date. The Board believes that, as calculator models capable of handling these calculations come into general use in the industry, the considerations of compliance cost which lead it to reject these proposals at this time will no longer be of concern.

The Board has also decided not to adopt the suggestion for converting to the use of an "actual/365" day-counting method. Several of the commentators pointed out the problems that such a conversion would cause, particularly in computing interest on existing securities and in preparing and printing certificates for new issues of securities. The Board does not believe that the correction of the minor inaccuracy in computations arising from the use of the "30/360" day count method is sufficient to outweigh the significant compliance problems the industry would experience in making such a conversion.

\* \* \* \* \*

Several commentators suggested that the Board consider publishing a general treatment of the calculations area, including material on the meaning and use of the various formulas, interpretive material on the use of the formulas for specific types of securities, and information concerning programming algorithms and benchmark calculations. The Board intends to prepare and publish a document of this type at the time the rule is approved.

Proposed rule G-33 must be approved by the Securities and Exchange Commission, and, as noted, will not become effective until six months after the date of Commission approval.

\*Under the truncation method, a unit dollar price of "99.4837519" becomes "99.483," with the remaining decimal values being discarded. Under the proposal in the draft rule "99.4837519" would have been truncated after the fourth decimal place ("99.4837"), the remaining decimal values being discarded, and then rounded to the third, becoming "99.484".



## Text of Proposed Rule

### Rule G-33. Calculations

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

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

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 at Maturity.** Except as otherwise provided in this section (b), the dollar price for a transaction in a security paying interest at maturity shall be computed in accordance with the following formula:

$$P = \left[ \frac{1 + \left( \frac{\text{DIM}}{B} * R \right)}{1 + \left( \frac{\text{DSM}}{B} * Y \right)} \right] - \left[ \frac{A}{B} * R \right]$$

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);

"DIM" is the number of days from the issue date to the maturity date (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);

"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); 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 six months or less to maturity, the following formula shall be used:

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

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);

"DSM" is the number of days from the settlement date to the redemption 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 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 six months to maturity, the following formula shall be used:

$$P = \left[ \frac{RV}{\left(1 + \frac{Y}{2}\right)_{\text{exp}}^N - 1 + \frac{E-A}{E}} \right] + \left[ \sum_{K=1}^N \frac{100 * \frac{R}{2}}{\left(1 + \frac{Y}{2}\right)_{\text{exp}}^{K-1} - 1 + \frac{E-A}{E}} \right] - \left[ 100 * \frac{A}{B} * R \right]$$

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);



"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.

(C) *Transactions Where the Yield Equals the Interest Rate.* A transaction in a security with a redemption value of par that is effected on the basis of a yield price equal to the interest rate of the security shall be exempt from the requirements of subparagraph (b) (i) (B) until January 1, 1984.

(D) *Interpolation.* The computation of a dollar price by means of interpolation shall be deemed to be in compliance with this paragraph (b) (i) until January 1, 1984.

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

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

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

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);

"DIM" is the number of days from the issue date to the maturity date (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);

"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); and

"Y" is the yield on the investment if the security is held to maturity (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 six months or less to maturity, the following formula shall be used:

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

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);

"DSM" is the number of days from the settlement date to the redemption 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 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 six months to maturity, 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:

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



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:

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

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) (viii) (B) 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 municipal notes, on the day count basis selected by the issuer of the securities.

(ii) *Day Count Formula.* Computations of day counts for purposes of this rule 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", and the symbol "D2" has a value other than "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.

(f) Effectiveness. The requirements of this rule shall become effective on \_\_\_\_\_ [six months following the date of Commission approval], except as provided in subparagraphs (C) and (D) of paragraph (b) (i).