

Annual Report 1988
National Securities Clearing Corporation

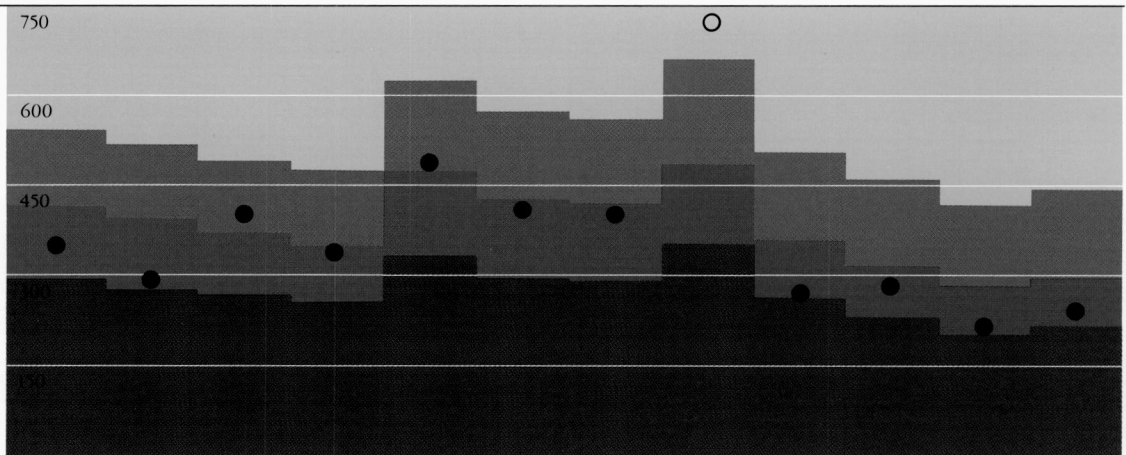


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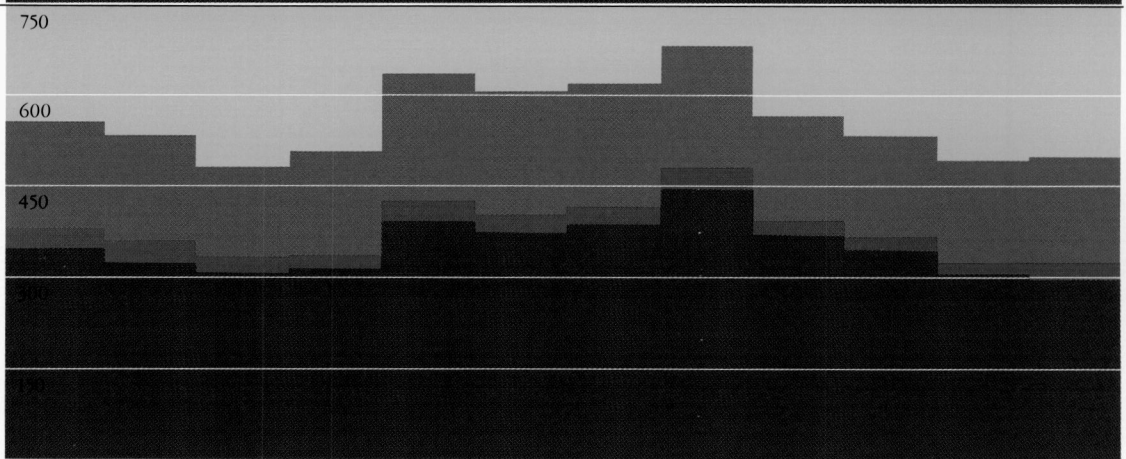
Average Daily Volume of Transactions Processed
(In thousands)

- Municipal Bonds, Mutual Funds & Others
- OTC Stocks & Bonds
- NYSE & Amex
- Peak NYSE Processing Volume
- Peak NYSE processing volume in Q4 87 was over 890,000 sides.



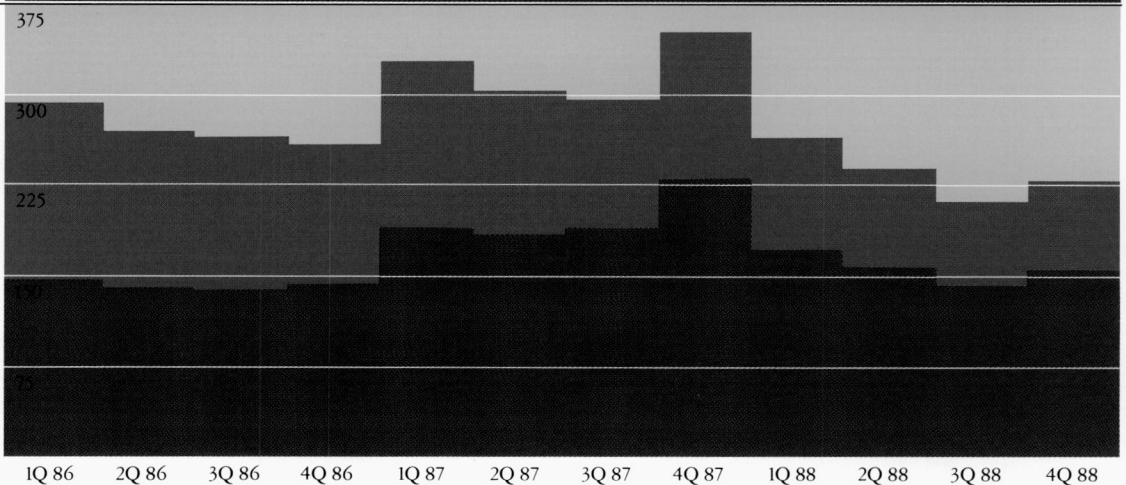
Average Daily Volume of Shares Processed
(In millions)

- OTC
- Amex
- NYSE

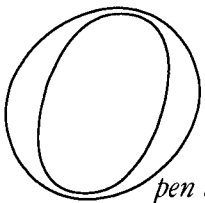


Average Daily Volume of NYSE Locked-In Transactions Processed
(In thousands)

- Trade Submissions
- Locked-In Transactions



In spite of a decline in transaction and share volume in 1988, NSCC continued to recognize that the cost of maintaining and improving its systems is modest in comparison to the risks of not being prepared to handle peak volume periods. Over the years, processing efficiency has increased as marketplaces report trades to NSCC as compared trades through automated trading systems. In 1988, 66% of NYSE transactions were reported to NSCC as locked-in, up from 52% in 1986.



Open and effective dialogue between NSCC and the securities industry in 1988 enabled NSCC to implement several system enhancements developed to increase participants' processing efficiency. Continued cooperation with the industry will allow NSCC to foresee and respond to participants' needs over the next decade as they meet the challenges presented by the growth in derivative markets and the globalization of markets.

David M. Kelly
President and Chief Executive Officer

Bernard L. Madoff
Chairman of the Board

To Our Participants

As one reflects on 1988, it is clearly evident that many changes occurred in the marketplaces. The events of October 1987 resulted in a predicted decline in volume and hastened the pace of change within the securities industry. NSCC revenues were down over 11% and transaction and share volume declined 31% and 18%, respectively. At the same time, the average size of a trade increased by 19% supporting the much-heralded decline in retail participation.

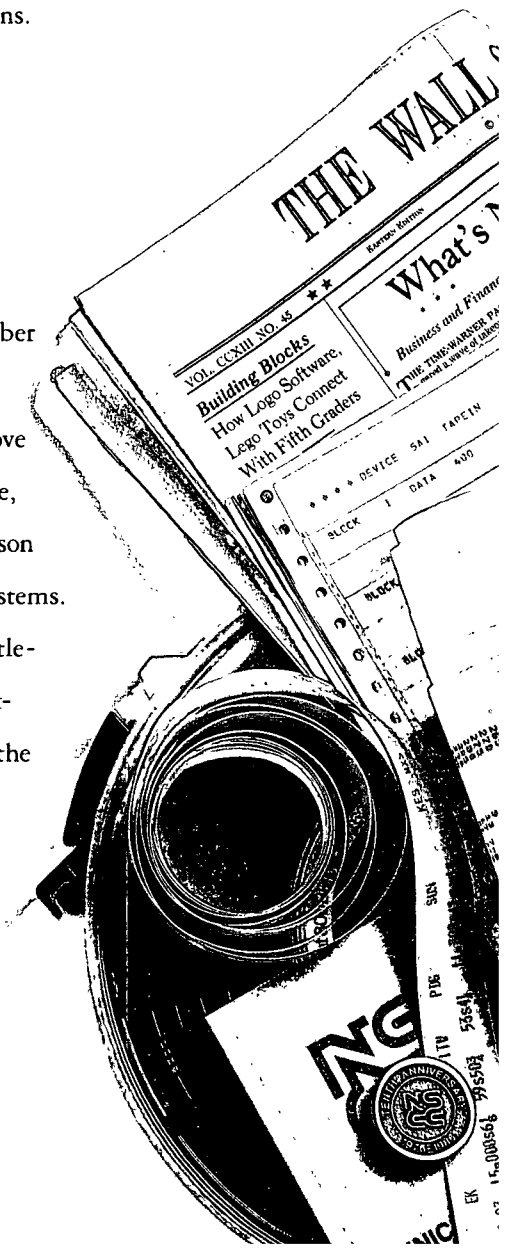
The industry devoted more attention to increasing cost efficiencies and reducing risks as many appeared to be headed for a different future in the ever-changing financial services business. While NSCC has long focused on increasing capacity levels and expanding our product base, it was apparent in 1988 that better use of technology is critical for this industry to operate profitably at lower volumes.

NSCC has benefitted greatly from working closely with the markets and participants we serve. Cooperation will continue to be important in a market where change and competition are on the rise. In fact, as markets become more global, it is essential that capital markets, regulatory and clearance and settlement functions work together to understand what globalization means to our business. The industry is already working together on a global basis with a view toward establishing clearance and settlement standards within markets and for cross-border transactions. These efforts are supported by The Group of Thirty and the Fédération Internationale des Bourses de Valeurs which provide forums for discussion and direction. The markets are prepared to meet the challenges ahead and NSCC will work tirelessly to support their efforts.

The Year in Review

The year proved to be one of great challenge for NSCC. One of the positive results of the October 1987 events was a renewed effort within the industry to take greater advantage of systems automation and to reduce risk. NSCC worked closely with the NYSE, Amex and NASD to move toward comparison on Trade Date with total trade resolution by the end of Trade Date Plus One, a process with significant interdependencies. NSCC has redesigned its listed and OTC comparison systems to support the NYSE's, Amex's and NASD's efforts to implement on-line correction systems.

Participation in Fund/SERV, NSCC's automated order entry, confirmation and settlement system for mutual funds, increased with 48 broker/dealers and 38 fund groups, representing approximately 600 funds, using the system. The mutual funds process was enhanced with the development of a Networking system which provides for the electronic transfer of information between broker/dealers and fund groups. Networking was implemented on a pilot basis in September and continues to meet developmental milestones.



To Our Participants (continued)

The Automated Customer Account Transfer (ACAT) service continued to enjoy broad support and has become the standard for asset transfers between brokers. The system was enhanced to facilitate the processing of options positions, and NSCC began work on changes that will enable the transfer of limited partnerships. Development of a link between ACATs and Fund/SERV to allow the transfer of mutual fund assets between broker/dealers in a controlled and automated environment is also under way.

NSCC's Municipal Bond System expanded with a netting program for when-issued municipals. By year end, participants could process all when-issued trades of DTC-eligible issues in CNS. The 127 participants in the pilot represent over 65% of the total when-issued volume processed by NSCC and we hope to expand that base. In 1989, we plan to offer regular-way netting based on the results of an extensive study of regular-way municipal bond trading.

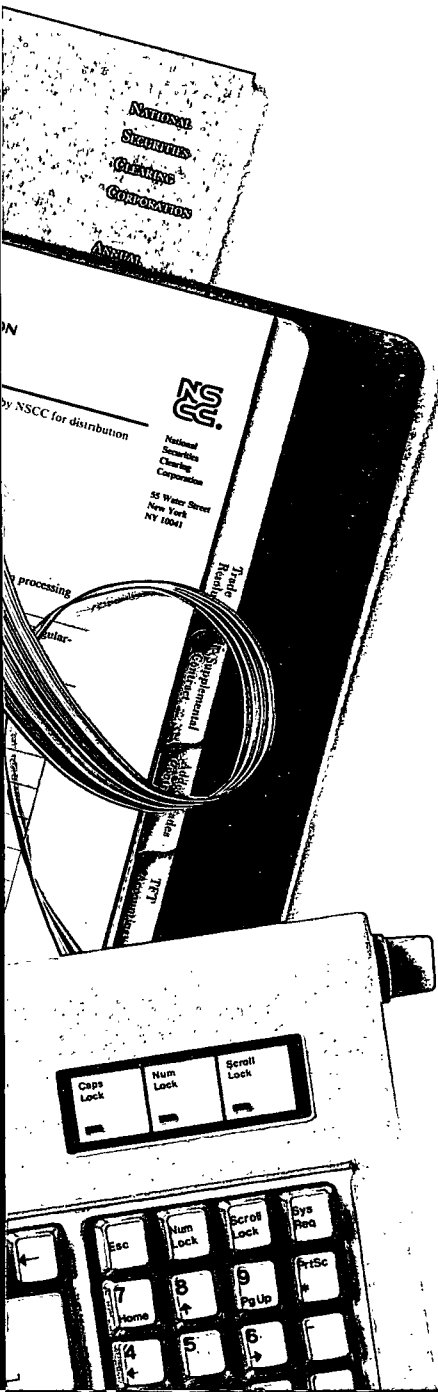
International Securities Clearing Corporation (ISCC) continued to establish bilateral clearing and custody links with other international clearing and depository organizations. The process of developing these links involves a significant amount of learning as we become familiar with the local practices, systems and technology that exist in foreign markets. In 1988, ISCC's link with The International Stock Exchange in London became bilateral. In addition, ISCC established a clearing link with Cedel in Luxembourg and custody links in Japan and Singapore and began work on a link with France.

Participants in Government Securities Clearing Corporation (GSCC), established in 1986 through cooperative efforts by the government securities industry, elected the first Participant Shareholder Board of Directors following the sale of stock in May 1988. The Board will work closely with GSCC in determining the future advancements in the technology for processing and settling government securities transactions. GSCC implemented its automated comparison system in August and plans to make netting services available to participants in 1989.

In closing, we would like to thank our Board of Directors and staff, our participants and the staff at SIAC and DTC for their continued support and efforts in a year that saw much restructuring and cost cutting within the industry, but also presented increased opportunities to work together for positive change.

Bernard L. Madoff
Chairman of the Board

David M. Kelly
President and Chief Executive Officer



About NSCC

NSCC is the nation's leading provider of post-trade clearance and settlement services for corporate securities, municipal bond, UIT and mutual fund transactions to the broker/dealer, bank and mutual funds communities. Over 1,800 brokers, dealers, banks and other financial institutions use NSCC's services as direct participants, as regional participants through the Regional Interface Operations or as indirect participants through Correspondent Clearing and Special Representative relationships.

NSCC provides these services through a nationwide network of branch offices, electronic interfaces with other clearing corporations and a variety of data transmission capabilities including tape input, cpu-to-cpu links and PC access for some applications.

Branch Offices

National Securities Clearing Corporation

Corporate Office
55 Water Street
New York, New York 10041
(212) 510-0400

Boston
One Boston Place
Boston, Massachusetts 02108

Chicago
135 South LaSalle Street
Chicago, Illinois 60603

Dallas
Plaza of the Americas
TCB Tower
Dallas, Texas 75201

Denver
Dominion Plaza
600 17th Street
Denver, Colorado 80202

Detroit
3153 Penobscot Building
Detroit, Michigan 48226

Jersey City
One Exchange Place
Jersey City, New Jersey 07302

Los Angeles
727 West 7th Street
Los Angeles, California 90017

Minneapolis
IDS Center
80 South 8th Street
Minneapolis, Minnesota 55402

St. Louis
One Mercantile Tower
St. Louis, Missouri 63101

San Francisco
250 Montgomery Street
San Francisco, California 94104

Seattle
1525 Fourth Avenue
Seattle, Washington 98101

Toronto
Two First Canadian Place
Toronto, Ontario, Canada
M5X 1A9

International Securities Clearing Corporation

Corporate Office
55 Water Street
New York, New York 10041
(212) 510-0400

Government Securities Clearing Corporation

Corporate Office
55 Water Street
New York, New York 10041
(212) 510-0400

NSCC Board of Directors

In a year marked by lower volumes and industry cutbacks, NSCC relied heavily on the expertise and experience of the members of its Board of Directors to provide guidance and direction in the Board's decision-making processes. The Board worked closely with senior management at NSCC over the year in establishing corporate objectives and guiding product development and operational planning.

Thirteen members of the 17-member Board, including Bernard L. Madoff who will complete his term as Chairman in May 1989, are elected from participant firms. The other members of the Board are David M. Kelly, President and CEO of NSCC, and three Shareholder Directors designated by the New York Stock Exchange, American Stock Exchange and National Association of Securities Dealers: Richard A. Grasso, Paul G. Stevens and C. Richard Justice, respectively.

In late 1988, the Nominating Committee began the annual electoral process by inviting participants to propose names of prospective directors to succeed Herbert I. Levitt, who is resigning in May 1989, and J. Kevin Kenny, Bernard L. Madoff, Richard J. Stream and Wilbert A. Thiel whose terms expire in May. After reviewing suggestions from participants, the Nominating Committee nominated James M. Avena, Cantor Fitzgerald & Co., Inc.; Bruce E. Geismar, Bear, Stearns & Co. Inc.; David W. Niemiec, Dillon, Read & Co. Inc.; and Darryl L. Pope, Edward D. Jones & Co. to serve three-year terms as Participant Directors. Mr. Thiel was nominated to serve an additional one-year term to complete Mr. Levitt's term. The nominees will be elected at the Board's Annual Meeting in May 1989.

Bernard L. Madoff¹²
Chairman of the Board
Sole Proprietor
Bernard L. Madoff

William P. Behrens⁹
General Partner
Ernst & Company

Richard A. Grasso¹⁴
President & COO
New York Stock Exchange, Inc.

Gates H. Hawn⁸
Chief Executive Officer
Pershing Division of Donaldson,
Lufkin & Jenrette Securities
Corporation

Leonard V. Haynes¹¹
Senior Executive Vice President
Shearson Lehman Hutton Inc.

C. Richard Justice³
Executive Vice President
National Association of
Securities Dealers, Inc.

David M. Kelly⁶
President & CEO
National Securities Clearing
Corporation

J. Kevin Kenny⁵
President & CEO
J.J. Kenny Co., Inc.

Herbert I. Levitt⁴
Limited Partner
Spear, Leeds & Kellogg

Ronald W. Readmond²
Managing Director
Alex. Brown & Sons Incorporated

David L. Roscoe III
Senior Vice President
Morgan Guaranty Trust
Company of New York

Howard A. Shallcross
Senior Vice President &
Director of Operations
Merrill Lynch, Pierce,
Fenner & Smith Inc.

Paul G. Stevens
Executive Vice President
American Stock Exchange, Inc.

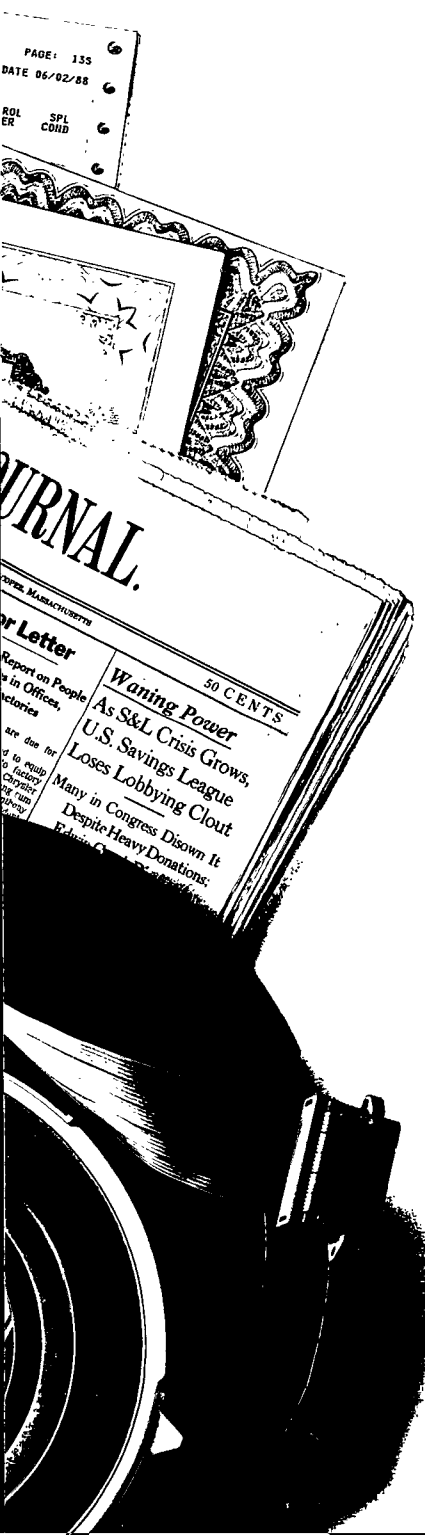
Richard J. Stream¹⁰
Managing Director
Piper, Jaffray & Hopwood
Incorporated

Fenton R. Talbott¹³
Managing Director
The First Boston Corporation

Wilbert A. Thiel¹
Executive Vice President,
Treasurer
The Chicago Corporation

Ronald D. Upton⁷
Executive Vice President
Irving Trust Company

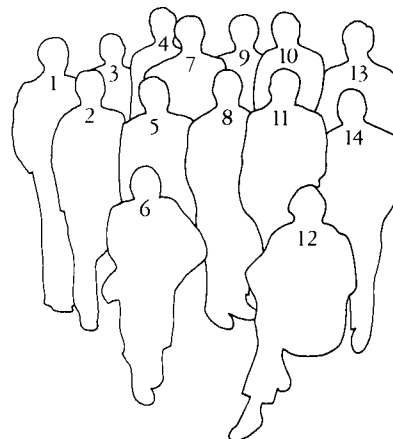
Not Pictured:
David L. Roscoe III
Howard A. Shallcross
Paul G. Stevens





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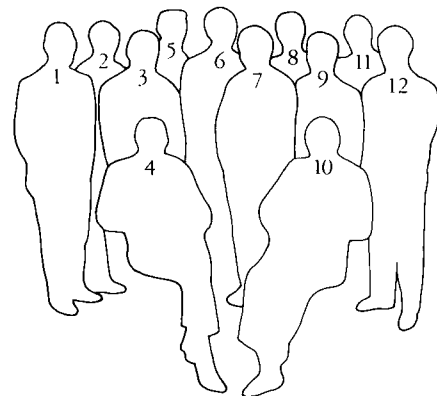
he Board of Directors of NSCC offers guidance and support to NSCC in its mission to develop innovative systems and services which address the financial industry's needs for cost-effective, low-risk, high-volume trade processing.





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With the continuing globalization of the securities markets, ISCC's Board of Directors supports ISCC's strategy to develop links with clearing and depository organizations in other countries and to provide locally accessible clearance and settlement capabilities for U.S. firms dealing in foreign securities and foreign firms dealing in U.S. securities.



ISCC Board of Directors

The Board of Directors of ISCC offers support and guidance to ISCC in its two-fold mission to provide locally accessible clearing services for non-U.S. securities to U.S. participants by establishing links with clearing and depository entities in other countries and to provide links into NSCC and The Depository Trust Company (DTC) for more efficient and standardized handling of U.S. issues listed overseas or involved in cross-border trading.

Comprised of senior executives from participant firms, ISCC's Board members bring a wealth of knowledge of global securities markets to ISCC. This knowledge and experience have proven invaluable in the establishment of clearing and custody links with The International Stock Exchange in London and Cedel in Luxembourg as well as the establishment of custody links with the Central Depository (Pte.) Ltd. in Singapore and Japan Securities Clearing Corporation in Tokyo.

Four directors resigned from the Board in 1988 as a result of changes in their corporate affiliations. The NYSE appointed Donald J. Solodar and the Amex appointed Ivers W. Riley to fill the vacancies left by resigning directors Christopher Keith and Mark T. Smith, respectively. Sal Ricca, SPC Securities Services Corp., was elected to replace C. Robert P. Meyjes who resigned in May 1988. Nicola L. Caporale resigned from the Board in December; his seat on the Board has not been filled.

Gerard P. Lynch, Chairman of the Board since November 1987, oversees the 14-member Board.

Gerard P. Lynch⁴
Chairman of the Board
Managing Director
Morgan Stanley & Co.
Incorporated

Joseph Anastasio¹²
Senior Operating
Officer
Salomon Brothers Inc

Nicola L. Caporale
General Partner
Goldman, Sachs & Co.
(Resigned in December 1988)

Joseph L. Gitterman III²
Managing Partner
LaBranche & Co.

C. Richard Justice¹¹
Executive Vice President
National Association of
Securities Dealers, Inc.

David M. Kelly¹⁰
President & CEO
International Securities
Clearing Corporation

Bernard L. Madoff⁷
Sole Proprietor
Bernard L. Madoff

Stephen E.J. Raven¹
Chairman
Charles Fulton (IDB) Limited

Michael T. Reddy⁵
Senior Vice President
Merrill Lynch, Pierce,
Fenner & Smith Inc.

Sal Ricca³
Managing Director & COO
SPC Securities Services Corp.

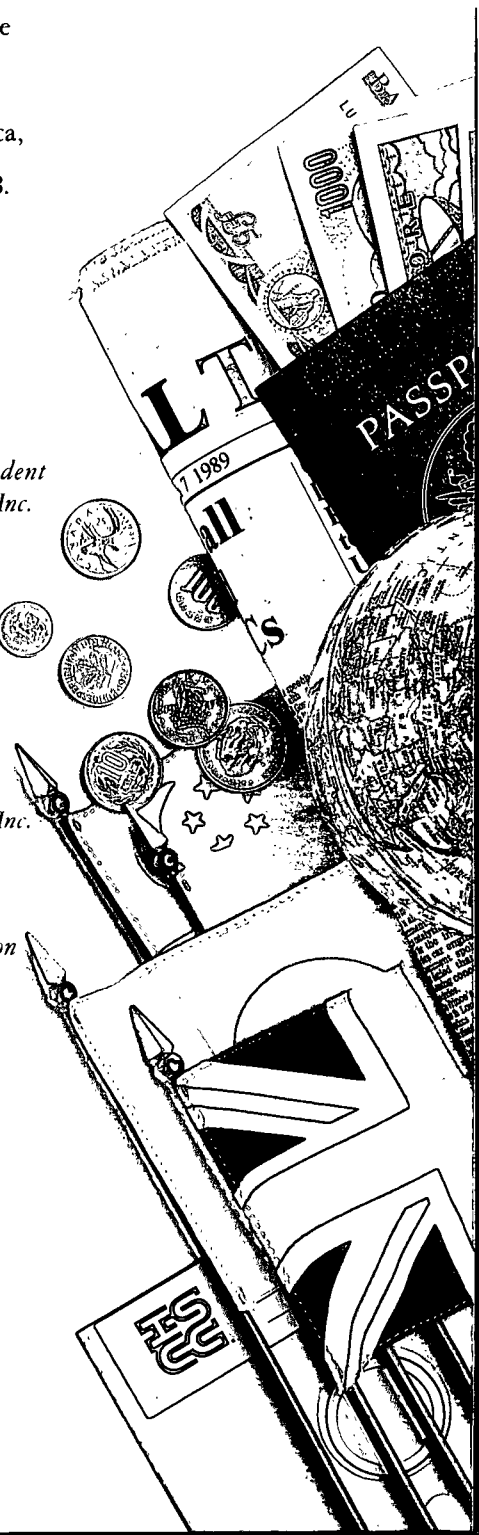
Ivers W. Riley⁹
Senior Executive Vice President
American Stock Exchange, Inc.

David L. Roscoe III⁸
Senior Vice President
Morgan Guaranty Trust
Company of New York

Donald J. Solodar
Senior Vice President
Capital Markets Group
New York Stock Exchange, Inc.

Fenton R. Talbott⁶
Managing Director
The First Boston Corporation

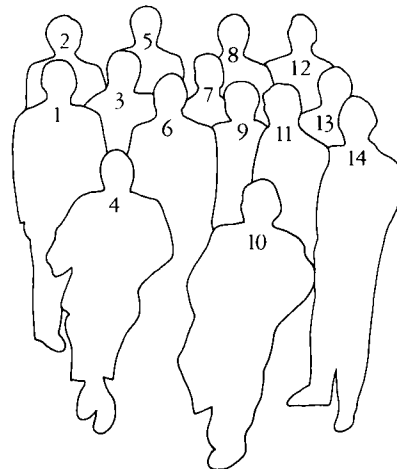
Not Pictured:
Nicola L. Caporale
Donald J. Solodar





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he first Participant Shareholder Board of Directors of GSCC is responsible for overseeing the operation of GSCC's automated comparison and netting systems and for determining the future system enhancements and technological advancements in the processing and settlement of government securities.



GSCC Board of Directors

In early 1988, GSCC offered shares in the company through a private placement offering. The stock sale provided the government securities community with the opportunity to be eligible to sit on the Board of Directors and thereby help shape GSCC's direction at the same time that it provided working capital for GSCC as it develops its operations. NSCC retains a 20% ownership interest in GSCC.

In August, GSCC participants elected the first Participant Shareholder Board of Directors. Nominations for the Board were made by participants in accordance with the Shareholder Agreement.

The 15-member Board consists of six dealers, three brokers, three clearing agent banks (Participant Shareholder Directors), two representatives from NSCC and one officer of GSCC. The 12 Participant Shareholder Directors each serve three-year terms. In 1991, Participant Shareholder Directors will be elected to serve one-, two- or three-year terms so that one-third of the Board will be replaced every year. The Board has established three standing committees: Executive, Audit and Finance and Membership and Standards.

In January 1989, GSCC elected Bruce R. Lakefield to serve as Chairman for a one-year term. Mr. Lakefield brings many years of experience in the government securities community to the GSCC Board.

Bruce R. Lakefield¹³
Chairman of the Board
Executive Vice President
Shearson Lehman Government
Securities, Inc.

Jorge A. Brathwaite⁵
Senior Vice President
The Bank of New York

Allen B. Clark⁷
Vice President
Manufacturers Hanover
Trust Company

Frank D. Cuoco, Jr.¹⁴
Executive Vice President
Garban Ltd.

Herbert Friedman¹
Managing Director
Salomon Brothers Inc

Peter E. Gall¹²
Senior Vice President &
Treasurer
Discount Corporation of New York
(Resigned in December 1988)

Edward J. Geng¹¹
President
Fundamental Brokers, Inc.

David M. Kelly⁴
President and CEO
National Securities Clearing
Corporation

Leonard C. Monteleone
Vice President
RMJ Securities Corp.

Charles A. Moran¹⁰
President and COO
Government Securities Clearing
Corporation

Alexander Neamtu³
Principal
Morgan Stanley & Co.
Incorporated

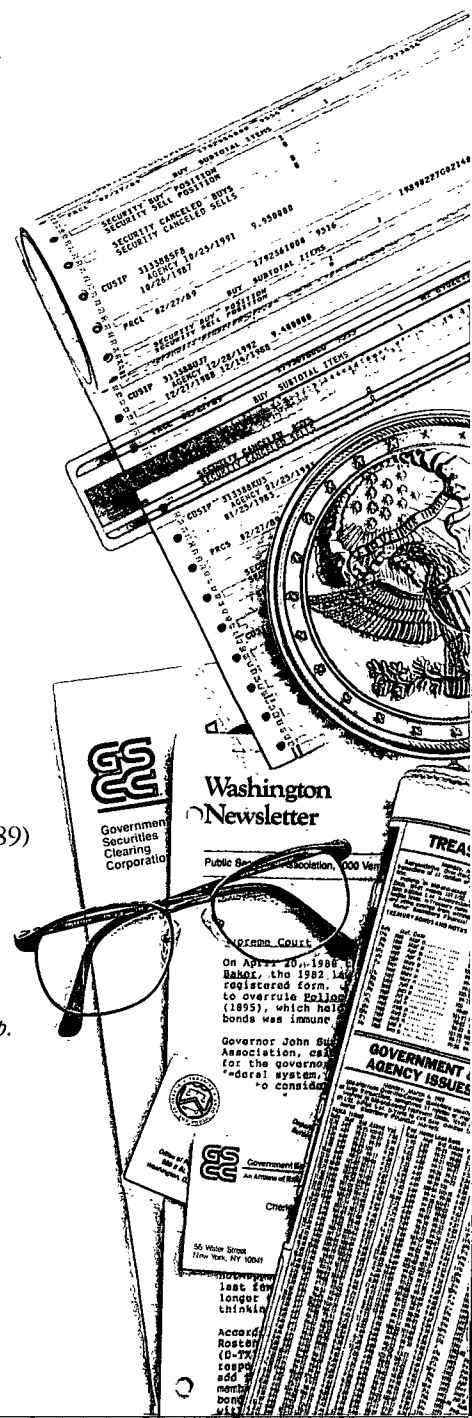
William D. Riley⁹
Managing Director
The First Boston
Corporation

Howard A. Shallcross⁶
Senior Vice President &
Director of Operations
Merrill Lynch, Pierce,
Fenner & Smith Inc.

M. Andrew Threadgold²
Managing Director
J.P. Morgan Securities Inc.

Ronald D. Upton⁸
Executive Vice President
Irving Trust Company
(Resigned in February 1989)

Not Pictured:
Leonard C. Monteleone
Sal Ricca
Managing Director & COO
SPC Securities Services Corp.
(Appointed in February
1989)



Consolidated Balance Sheet

National Securities Clearing Corporation

	December 31,	
(In thousands)	1988	1987
Assets		
<i>Current Assets:</i>		
Cash and cash equivalents	\$ 53,539	\$ 28,628
Temporary investments at cost (approximates market)	90,402	108,996
Accounts receivable, net	5,558	5,767
Settlement accounts receivable	3,183	4,746
Other current assets	970	1,318
Total current assets	153,652	149,455
Clearing fund	224,207	244,669
Fixed assets, less accumulated depreciation of \$1,964 and \$1,553 at December 31, 1988 and 1987, respectively	1,125	1,286
Deposits and other noncurrent assets	7,275	7,490
Total assets	\$386,259	\$402,900
Liabilities and Shareholders' Equity		
<i>Current Liabilities:</i>		
Accounts payable	\$ 7,247	\$ 7,440
Settlement accounts payable	68,206	44,574
Other	5,787	6,967
Total current liabilities	81,240	58,981
Clearing fund:		
Participants' cash deposits	65,908	85,312
Other participant deposits	224,207	244,669
	290,115	329,981
Notes payable	3,250	3,250
Commitments and contingent liabilities (See Note 5)		
<i>Shareholders' Equity:</i>		
Common stock authorized, issued and outstanding; 30,000 shares of \$.50 par value	15	15
Capital in excess of par	885	885
Retained earnings	10,754	9,788
	11,654	10,688
Total liabilities and shareholders' equity	\$386,259	\$402,900

The accompanying Notes to Consolidated Financial Statements are an integral part of this statement.

Consolidated Statement of Income and Retained Earnings

National Securities Clearing Corporation

	For the year ended	
	December 31,	
	1988	1987
<i>(In thousands)</i>		
Revenue from clearing services	\$70,852	\$72,335
Interest income	3,868	3,990
Total revenues	74,720	76,325
Expenses:		
Securities Industry Automation Corporation processing expenses	40,004	39,761
The Depository Trust Company fees	15,370	15,464
General and administrative	16,105	16,241
Regional facility fees	1,668	1,674
Total expenses	73,147	73,140
Income before income taxes	1,573	3,185
Provision for income taxes	607	1,297
Net income	966	1,888
Retained earnings, beginning of year	9,788	7,900
Retained earnings, end of year	\$10,754	\$ 9,788

The accompanying Notes to Consolidated Financial Statements are an integral part of this statement.

Consolidated Statement of Cash Flows

National Securities Clearing Corporation

For the year ended
December 31,
1988 1987

(In thousands)

Increase (Decrease) in Cash and Cash Equivalents

Cash Flows from Operating Activities:

Cash settlement received from participants	\$218,691,768	\$296,837,283
Cash settlement paid to participants	(218,672,729)	(296,852,535)
Clearing fund cash received from participants	24,199	49,165
Clearing fund cash refunded to participants	(43,603)	(24,653)
Cash received from billings to participants	69,932	71,633
Cash paid to processing agents	(55,735)	(54,689)
Cash paid to suppliers and employees	(11,193)	(14,735)
Interest received	8,838	10,542
Interest remitted to participants	(4,862)	(4,792)
Income taxes paid	(269)	(4,103)
Cash rental concession received	—	1,203
Net cash provided by operating activities	6,346	14,319

Cash Flows from Investing Activities:

Purchases of temporary investments	(158,160)	(186,624)
Sales and redemptions of temporary investments	176,976	193,903
Purchases of software and fixed assets	(251)	(2,056)
Net cash provided by investing activities	18,565	5,223

Net increase in cash and cash equivalents	24,911	19,542
Cash and cash equivalents at beginning of year	28,628	9,086
Cash and cash equivalents at end of year	\$ 53,539	\$ 28,628

Reconciliation of Net Income to Net Cash Provided by Operating Activities

Net income	\$ 966	\$ 1,888
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:		
Depreciation and amortization	412	374
Increase in accrued interest receivable	(1,635)	(262)
Amortization of premiums	1,628	2,022
Decrease (increase) in accounts receivable	209	(701)
Decrease in settlement accounts receivable	1,563	830
Decrease (increase) in other current assets	390	(555)
Increase in deferred tax asset	(42)	(908)
(Decrease) increase in accounts payable	(193)	228
Increase (decrease) in settlement accounts payable	23,632	(16,100)
(Decrease) increase in other liabilities	(1,180)	2,991
(Decrease) increase in clearing fund participants' cash deposits	(19,404)	24,512
Net cash provided by operating activities	\$ 6,346	\$ 14,319

The accompanying Notes to Consolidated Financial Statements are an integral part of this statement.

Notes to Consolidated Financial Statements

National Securities Clearing Corporation

Note 1 Organization and Operations:

National Securities Clearing Corporation (NSCC—the Company), a clearing agency registered with the Securities and Exchange Commission (SEC), provides various services to the financial community, consisting principally of trade comparison, clearance and settlement. The Company's common stock is owned equally by the New York Stock Exchange, Inc. (NYSE), American Stock Exchange, Inc. (Amex) and the National Association of Securities Dealers, Inc. (NASD). The Company is controlled by an independent user Board of Directors which is responsible for its policies, operations and financing.

The Company is the sole shareholder of International Securities Clearing Corporation (ISCC), which was established in 1985 to support U.S. brokers, dealers and banks through bilateral linkages with central clearing and depository organizations in other countries.

The Board of Directors of the Company determines any additions to retained earnings it wishes to establish in a given year, having due regard to current and anticipated needs. The Company does not plan to declare dividends to shareholders, but has provided rebates on its billings to participants of \$2,416,000 and \$10,398,000 in 1988 and 1987, respectively. Revenue from clearing services is shown net of such rebates.

Note 2 Summary of Significant Accounting Policies:

Principles of consolidation: The consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, ISCC. In 1987, the Company's consolidated financial statements also included the accounts of Government Securities Clearing Corporation (GSCC), a wholly owned subsidiary formed to provide automated comparison and netting services to brokers, dealers and banks trading in U.S. Government securities. On May 20, 1988, GSCC issued common stock to certain participants, which reduced NSCC's ownership interest to approximately 20%. The Company is accounting for its investment in GSCC subsequent to May 20, 1988 using the equity method of accounting. All significant inter-company accounts and transactions are eliminated in consolidation.

Cash and cash equivalents: The Company's investment policy allows for the investment of funds in overnight reverse repurchase agreements. Such agreements provide for the delivery versus payment of the underlying collateral of 102% to an independent custodian designated by the Company. Investments under reverse repurchase agreements amounted to \$40,000,000 and \$25,000,000 at December 31, 1988 and 1987, respectively.

Temporary investments: Temporary investments consist of U.S. Treasury securities maturing primarily in less than one year, and are carried at cost adjusted for amortization of premiums and accretion of discounts. Investments of \$44,400,000 and \$29,972,000 at December 31, 1988 and 1987, respectively, were held in an account for the exclusive benefit of participants to facilitate participants' compliance with customer segregation rules of the SEC.

Settlement accounts: Settlement accounts receivable and payable arise from one-day time lags in the cash settlement process between the Company and its participants and other registered clearing agencies. The nature of the Company's business involves significant

money transfers on a daily basis, certain of which are executed via Federal Funds and given effect in the financial statements on the basis of one-day earlier Clearing House Funds.

Notes payable: Notes payable consist of \$3,250,000 of ten-year Notes issued by ISCC due June 15, 1996. The Notes bear interest at a rate of 9% per annum, and interest payments are made annually on June 15.

Income taxes: Provision is made for deferred income taxes applicable to revenues and expenses reported in the financial statements in periods which differ from those in which they are subject to taxation.

In December 1987, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 96, *Accounting for Income Taxes*. SFAS 96 mandates the liability method for computing deferred income taxes. The Company intends to adopt SFAS 96 during the year when adoption becomes mandatory. Adoption of the new Statement is not expected to have a significant effect on the Company's financial position or results of operations.

The Company and its wholly owned subsidiary file consolidated Federal, New York State and City income tax returns. The difference between the 38.6% effective tax for the year ended December 31, 1988 (40.7% for the year ended December 31, 1987) and the 34% federal statutory tax rate (40% for the year ended December 31, 1987), is primarily attributable to state and local taxes.

Note 3 Participant Deposits:

The rules of the Company require certain participants to maintain minimum clearing fund deposits based on calculated requirements. The consolidated clearing fund balance includes the NSCC and ISCC clearing funds, which are available to secure respective participant obligations and certain liabilities of NSCC and ISCC, should they occur. Clearing fund requirements and cash in excess of calculated requirements amounted to \$290,115,000 and \$329,981,000 at December 31, 1988 and 1987, respectively. Total clearing fund deposits held at December 31, 1988 consisted of \$65,908,000 in cash, \$44,702,000 in market value of securities issued or guaranteed by the U.S. Government, its states and their political subdivisions, and \$264,122,000 in letters of credit issued by authorized banks; comparative amounts as of December 31, 1987 were \$85,312,000, \$59,881,000 and \$318,902,000, respectively.

Note 4 Transactions with Related Parties:

GSCC: Effective May 20, 1988, the Company entered into an agreement with GSCC to provide various support services and office facilities. Charges under this agreement are based on the Company's cost of providing these services. The agreement formally expires in 1993; however, it will continue in effect unless notice of cancellation is given by either party. Costs under this agreement amounted to \$2,700,000 in 1988. At December 31, 1988, receivables from GSCC amounted to \$362,000.

NYSE, Amex and NASD: NSCC collects regulatory fees on behalf of NYSE, Amex and NASD. At December 31, 1988, amounts collected and not yet remitted were \$1,664,000 due to NYSE and \$138,000 due to NASD. At December 31, 1987, amounts due to NYSE were \$1,707,000 and amounts due to NASD were \$173,000.

Notes to Consolidated Financial Statements (continued)

National Securities Clearing Corporation

SIAC and DTC: Under the terms of an agreement, the Securities Industry Automation Corporation (SIAC), an entity owned by NYSE and Amex, provides facilities, personnel and services in support of the Company's operations. SIAC charges NSCC for these services based on its direct, computer and overhead costs arising from providing such services. The agreement has no expiration date and continues in effect unless notice of cancellation is given by either party.

Prior to May 1, 1987, the Company rented certain office space from SIAC. Rental payments to SIAC amounted to \$203,000 in 1987. Effective May 1, 1987, the Company entered into a lease agreement directly with the landlord and subsequently sublet a portion of the space to SIAC. Rental payments received from SIAC amounted to \$1,547,000 in 1988 and \$1,016,000 in 1987.

NYSE, Amex and NASD own minority interests in The Depository Trust Company (DTC), whose facilities are used by the Company. DTC fees included \$12,070,000 and \$11,547,000, net of rebates, in 1988 and 1987, respectively, relating to charges for NSCC participants which the Company sponsors at DTC. NSCC passes through these charges directly to the sponsored participants. In addition, the Company rents certain office space from DTC. Rental payments amounted to \$795,000 and \$651,000 in 1988 and 1987, respectively.

Amounts payable at December 31, 1988 to SIAC and DTC were \$4,332,000 and \$351,000, respectively (\$3,768,000 and \$778,000, respectively, at December 31, 1987). Amounts receivable from SIAC at December 31, 1988 amounted to \$577,000.

Note 5 Commitments and Contingent Liabilities:

The Continuous Net Settlement (CNS) system interposes the Company between participants in securities clearance and settlement. The failure of participants to deliver securities to the Company, and the corresponding failure of the Company to redeliver the securities, results in open positions. Open positions are marked-to-market daily. Such marks are debited or credited to the involved participants through the settlement process. At the close of business on December 31, 1988, open positions due the Company approximated \$568,000,000 (\$727,000,000 at December 31, 1987), and open positions due by the Company to participants approximated \$406,000,000 (\$539,000,000 at December 31, 1987) for unsettled positions and \$162,000,000 (\$188,000,000 at December 31, 1987) for securities borrowed through the Company's Stock Borrow Program.

In connection with an agreement ISCC has with The International Stock Exchange (ISE) in London, ISCC guarantees the settlement obligations of its members at ISE. ISCC's members collateralize such obligations by depositing clearing fund amounts with ISCC as required pursuant to the ISCC Member's Agreement.

Under the terms of the agreement with SIAC noted above, the Company is contingently liable in the event of cancellation for computer equipment leases in the amount of \$5,551,000 at December 31, 1988. This contingent liability under the current agreement decreases to zero in 1991.

Additionally, in connection with SIAC's contemplated establishment of a dual processing site, the Company has entered into an agreement indemnifying NYSE, the guarantor, for NSCC's propor-

tionate share of proposed long-term lease obligations. The Company's contingent liability under this agreement is approximately \$2,000,000 per annum through 1998.

At December 31, 1988, future minimum annual rental payments under all noncancellable operating leases were as follows:

1989	\$ 3,525,000
1990	3,497,000
1991	2,940,000
1992	2,804,000
1993	2,990,000
1994 and thereafter	11,616,000
Total minimum annual rental payments	\$27,372,000

Total sublease rentals of \$3,555,000 are to be received over the three-year period 1989 through 1991 under noncancellable subleases at December 31, 1988. Rental expense amounted to \$1,973,000 and \$1,628,000, which is net of rental reimbursements of \$1,547,000 and \$1,016,000 in 1988 and 1987, respectively.

Note 6 Pension Plan:

The Company has a trustee noncontributory defined benefit pension plan covering substantially all employees. Benefits under this plan are generally based on employees' years of service and compensation during the years immediately preceding retirement. The Company's funding policy is to make contributions under the plan that meet or exceed the minimum funding standards under the Employee Retirement Income Security Act of 1974 and the Internal Revenue Code of 1986, as amended. Pension cost for 1988 is summarized as follows:

Service cost	\$ 298,750
Interest cost	215,047
Actual return on plan assets	(84,716)
Net amortization and deferral	(45,487)
Total pension cost	\$ 383,594

Pension cost for the year ended December 31, 1987 amounted to \$374,842. The funded status of the plan at December 31, 1988 was as follows:

Actuarial present value of benefit obligations:	
Vested benefit obligation	\$ (953,564)
Nonvested benefit obligation	(180,459)
Accumulated benefit obligations	(1,134,023)
Effect of salary projections	(1,755,584)
Projected benefit obligation	(2,889,607)
Fair value of plan assets	2,141,763
Plan assets less than projected benefit obligation	(747,844)
Unrecognized net gain	(201,766)
Unrecognized transitional liability	453,443
Accrued pension cost	\$ (496,167)

The expected rate of return on plan assets was 8% in 1988. The discount rate and rate of increase in future compensation levels used in determining the actuarial present value of accumulated benefit obligations were 9% and 8%, respectively, in 1988.

Report of Independent Accountants

National Securities Clearing Corporation

Price Waterhouse

153 East 53rd Street
New York, NY 10022



To the Board of Directors and Shareholders of
National Securities Clearing Corporation

February 21, 1989

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income and retained earnings and of cash flows present fairly, in all material respects, the financial position of National Securities Clearing Corporation and its subsidiary at December 31, 1988 and 1987, and the results of their operations and their cash flows for the years then ended in conformity with generally accepted accounting principles. These financial statements are the responsibility of the company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in

accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

Price Waterhouse

Corporate Officers

NSCC Officers

Bernard L. Madoff
Chairman of the Board

David M. Kelly
President and CEO

Robert A. Schultz
Executive Vice President

Robert J. Woldow
*Executive Vice President,
General Counsel and Secretary*

Walter H. Cushman
Senior Vice President

John F. Elberfeld
Senior Vice President

Armand Keim
Senior Vice President

Marvin B. Koehler
*Senior Vice President
and Treasurer*

Steve M. Labriola
Senior Vice President

Sandy Manata
Senior Vice President

Thomas K. McCarthy
*Vice President /
Director of Operations*

Karen L. Saperstein
*Vice President /
Director of Legal and
Associate General Counsel*

Henry J. Belusa
Vice President

Catherine Craig Chaudhuri
Vice President

John D. Fitzgerald
Vice President

David F. Hoyt
*Vice President and Assistant
Secretary*

Jeffrey F. Ingber
Vice President

Michael J. Kelleher
Vice President

Richard P. Kent
Vice President

Kevin F. Maloney
Vice President

Michael M. Molloy
Vice President

Neil Outcalt
Vice President

William H. Thomas
Vice President

ISCC Officers

Gerard P. Lynch
Chairman of the Board

David M. Kelly
President and CEO

Richard W. Myers
*Executive Vice President
and COO*

Mary Ann Callahan
Vice President

Marvin B. Koehler
*Chief Financial Officer
and Treasurer*

Robert J. Woldow
Secretary and General Counsel

GSCC Officers

Bruce R. Lakefield
Chairman of the Board

David M. Kelly
Vice Chairman and CEO

Charles A. Moran
President and COO

Thomas F. Costa
Senior Vice President

Frederick B. Roemer
First Vice President

Janet R. Ferrante
Vice President

John F. Elberfeld
*Chief Financial Officer
and Treasurer*

Participating Organizations

(as of December 31, 1988)

- ABD Securities Corporation
Adams, Harkness & Hill, Inc.
Adler, Coleman & Co., Inc.
Advest, Inc.
Agora Securities, Inc.
J. Alexander Securities, Inc.
Fred Alger & Company Incorporated
Allen & Company Incorporated
Allen Securities Corp.
Alpine Associates
Amalgamated Bank of New York
American Securities Corporation
American Stock Exchange Clearing Corporation
Amster & Co.
Arnhold and S. Bleichroeder, Inc.
Asiel & Co.
BHF Securities Corporation
BT Brokerage Corporation
Julius Baer Securities Inc.
Baird, Patrick & Co., Inc.
Robert W. Baird & Co., Incorporated
Bank of Montreal, New York Branch
The Bank of New York
The Bank of New York—Brokers Clearance
Bankers Trust Broker Clearing Unit
Bankers Trust—Clearance
Bankers Trust Company
Bankers Trust/Investment Services
Barclays Bank International Limited
George K. Baum & Co.
Bear, Stearns & Co. Inc.
Bear, Stearns Specialist
Beauchamp & Co.
Beckman & Co., Inc.
Benton & Company
Sanford C. Bernstein & Co., Inc.
Bidwell & Company
Blackmore & Co., Inc.
Charles M. Blair & Co., Inc.
William Blair & Company
Blinder, Robinson & Co., Inc.
Bocklett & Co.
Boston Stock Exchange Clearing Corp.
Barrett & Company
Bodell Overcash Anderson & Co., Inc.
Buell Securities Corp.
Cantella & Co. (Retail)
Datek Securities Corp.
Diamant Investment Corp.
F. W. Doyle & Co.
Gage-Wiley & Co., Inc.
Gowell Securities Corporation (Retail)
Instant Funds Incorporated
Investors Discount Corporation
Kimball & Cross
Linsco Corp.
Merrimack Valley Investment Inc.
H. M. Payson & Co.
Shelter Rock Securities Corp.
Winslow Investment Company
Arthur W. Wood Company
- Boston Stock Exchange Specialist Account
ABD Securities Corp.
BHF Securities Corp.
Blodgett & Co.
Cantella & Co.
The Chicago Corporation
Dean Witter Reynolds Inc.
Dietrich & Company
William Ferris & Co., Inc.
Ganoudis Securities, Inc.
Garden State Securities, Inc.
Gowell Securities Corp.
Hawthorne Securities Corp.
K. and S., Inc.
King, Keller & Co.
Meadowbrook Securities, Inc.
Merrill Lynch Specialists Inc.
National Financial Services Corp.
Ocean Hill Equities, Inc.
PaineWebber Specialists, Inc.
Pershing Division of Donaldson, Lufkin & Jenrette Securities Corporation
Prescott, Ball & Turbin, Inc.
J. C. Bradford & Co.
Branch, Cabell & Co.
Broadcort Capital Corporation
Brounoff, Claire & Co., Inc.
Alex. Brown & Sons Incorporated
Brown Brothers Harriman & Co.
Brown & Company Securities Corporation
Brown, Lisle/Cummings, Inc.
P. R. Burke & Co.
Burns Fry Hoare Govette Inc.
Burns, Pauli & Co., Inc.
Cable, Howse & Ragen
D. A. Campbell Company, Inc.
Campbell, Waterman, Inc.
Canadian Depository for Securities Limited
Andras Research Capital Inc.
Brawley Cathers Limited
Alfred Bunting & Company Ltd.
Burns Fry Limited
Canarim Investment Corporation Ltd.
Connor, Clark & Company Ltd.
Darier Canada Inc.
Deacon Morgan McEwen Easson Limited
Dean Witter Reynolds (Canada) Inc.
Deragon Langlois Ltd.
Disnat Investment Inc.
First Canada Securities Corporation
First Marathon Securities Limited
Geoffrion, Leclerc Inc.
Gordon Capital Corporation
Greenline Investor Services Inc.
Guardian Trust Company
Lafferty, Harwood & Partners Ltd.
Levesque, Beaubien Inc.
Loewen, Ondaadtje, McCutcheon & Co. Ltd.
MacDougall, MacDougall & MacTier Ltd.
McCarthy Securities Limited
McNeil, Mantha, Inc.
Merit Investment Corporation
- Midland Doherty Limited
Nesbitt Thomson Deacon Inc.
Odlum Brown Limited
Pemberton Securities Inc.
Pictet (Canada) and Company, Limited
RBC Dominion Securities Inc.
Richardson Greenshields of Canada Limited
ScotiaMcLeod Inc.
Thomson Kernaghan & Co. Ltd.
Walwyn Stodgell Cochran Murray Limited
Wood Gundy Inc.
Yorkton Securities Inc.
Canadian Imperial Bank of Commerce
Cantor Fitzgerald & Co., Inc.
Cantor Fitzgerald Corporate Brokers, Inc.
S. B. Cantor & Co., Inc.
Capital Shares, Inc.
Carr Securities Corp.
Carr & Thompson, Inc.
Carroll McEntee McGinley Securities, Inc.
Cenpac Securities Corporation
Challenge Securities, Inc.
J. W. Charles Securities, Inc.
Chase Dealer & Investment
The Chase Manhattan Bank, N.A.
Chase/Syndicate
Chemical Bank
Chemical Bank/CSI
The Chicago Corporation
S. W. Childs Management Corp.
The Cincinnati Stock Exchange
Citibank Dealer—Municipal Operations
Citibank/IFI Custody
Citibank, N.A.
Citibank—Private Banking Division
Citicorp Scrimgeour Vickers International, Inc.
Citizens and Southern Securities Corporation
Coast Options Inc.
Commerzbank Capital Markets Corporation
Common Back Office Inc.
Conklin, Cahill & Co.
The Connecticut Bank and Trust Company, N.A./Municipal Bond Dealer Department
The Connecticut Bank and Trust, N.A.
Coughlin & Co., Inc.
County NatWest Securities Corporation USA
- Cowen & Co.
Craig-Hallum, Inc.
Craigie Incorporated
Cresvale International, Inc.
Crowell, Weedon & Co.
Custodial Trust Company
DLJ Capital Markets
Dain Bosworth Incorporated
Daiwa Securities America Inc.
Daugherty, Cole Inc.
Davenport & Co. of Virginia, Inc.
D. A. Davidson & Co. Inc.
Shelby Cullom Davis & Company
Dean Witter Reynolds Inc.
deCordova, Cooper & Co.
Deltec Securities Corporation
Deutsche Bank Capital Corporation
Dillon, Read & Co. Inc.
Dillon Securities
Doft & Co., Inc.
Dominick & Dominick, Incorporated
Drexel Burnham Lambert Incorporated
E. I. Loan Services
Easton & Co.
A. G. Edwards & Sons, Inc.
Einhorn & Co.
Eppler, Guerin & Turner, Inc.
Equity Securities Trading Co., Inc.
Ernst & Company
Exchange Services, Inc.
Execution Services Incorporated
Fagenson & Company, Inc.
Fagenson & Company, Inc.—Retail
Fahnestock & Co., Inc.
Fechter, Detwiler & Co., Inc.
Fernandez, Bartsch & Mirra
Financial Clearing & Services Corporation
Financial Network Investment Corporation
First Alabama Investments, Inc.
First Albany Corporation
First Birmingham Securities Corporation
The First Boston Corporation
First Manhattan Co.
First of Michigan Corporation
First Options of Chicago, Inc.
First Southwest Company
First Wachovia Brokerage Service Corporation
Robert Fleming Inc.
Fossett Corporation
Walter N. Frank & Co.
Wm. V. Frankel & Co., Inc.
Freeman Securities Company, Inc.
Freeman Welwood & Co., Inc.
French American Banking Corp.
Albert Fried & Company
Fundamental Corporate Bond Brokers, Inc.
J.W. Gant & Associates, Inc.
Geldermann Securities, Inc.
Geldermann Securities, Inc. (Retail)
Gintelco, Inc.
Goldman, Sachs & Co.

Gordon & Co.
 Gradison & Company Incorporated
 Greenfield Partners
 Oscar Gruss & Son Incorporated
 Halcyon Investments
 Hanifen, Imhoff Inc.
 J. F. Hartfield & Co., Inc.
 The Heitner Corporation
 Henderson Brothers, Inc.
 Herzog, Heine, Geduld, Inc.
 Hill, Thompson, Magid & Co., Inc.
 J. J. B. Hilliard, W. L. Lyons Inc.
 Hopper Soliday & Co., Inc.
 Howard, Weil, Labouisse, Friedrichs Incorporated
 Wayne Hummer & Co.
 Huntleigh Securities Corporation
 IBJ Schroder Bank & Trust Co.
 INC Trading Corporation
 Icahn & Co., Inc.
 Illinois Company Investments, Inc.
 Ingalls & Synder
 Interstate/Johnson Lane Corporation
 InvestNet Corporation
 Irving Trust Company
 Irving Trust/Investment/Dealer
 JMS Execution Services
 Benjamin Jacobson & Sons
 Janney Montgomery Scott Inc.
 Jefferies & Co., Inc.
 Jesup & Lamont Clearing Corp.
 Johnston, Lemon & Co. Incorporated
 Edward D. Jones & Co.
 Josephthal & Co. Incorporated
 S. A. Judah & Co., Inc.
 K K & Company
 Kalb, Voorhis & Co.
 Kaufmann, Alsborg & Co., Inc.
 H. Kawano & Co., Inc.
 Kellner, DiLeo & Co.
 Kellogg Equities Execution
 Kemper Clearing Corp.
 J. J. Kenny Trading, Inc.
 Kidder, Peabody & Co. Incorporated
 C. L. King & Associates, Inc.
 Koonce Securities Inc.
 Henry Krieger & Co.
 LIT America, Inc.
 LIT America, Inc./DOT
 LaBranch & Co.
 Emmett A. Larkin Co., Inc.
 Lashco, Inc.
 Lasker, Stone & Stern
 Laterman & Company
 C. J. Lawrence, Morgan Grenfell, Inc.
 Lawrence, O'Donnell, Marcus & Co.
 Lazard Freres & Co.
 Lewco Securities Corp.
 S. B. Lewis & Company
 Liberty Street Trust Company

MKI Securities Corp.
 MN Services
 MS Securities Services Inc.
 Mabon, Nugent & Co.
 MacAllaster Pitfield Mackay Inc.
 Bernard L. Madoff
 Manufacturers and Traders Trust Company
 Manufacturers Correspondent Clearing Services
 Manufacturers Hanover Securities Corporation
 Manufacturers Hanover Trust Company
 Manufacturers Hanover Trust Company—Municipal Dealer Operations
 Marcus Schloss & Co., Inc.
 Marine Midland Bank—New York
 Market Investment Services Corp.
 Marketing One Securities, Inc.
 Mayer & Schweitzer, Inc.
 McCourtney-Breckenridge & Company
 McDaniel Lewis & Co.
 McDonald & Company Securities, Inc.
 C. L. McKinney & Co., Inc.
 M. J. Meehan & Co.
 Mellon Securities Trust Co.
 Mercator Partners
 Mericka & Co., Inc.
 Merrill Lynch, Pierce, Fenner & Smith Inc.
 Merrill Lynch, Pierce, Fenner & Smith Inc.—Securities Lending
 Midland Doherty Inc.
 Midwest Clearing Corporation
 Bartlett & Co.
 Equitable Securities Corporation
 Howe, Barnes & Johnson, Inc.
 Kessler Asher Clearing Inc.
 Lomas Securities USA, Inc.
 The Ohio Company
 Montgomery Securities
 Morgan Guaranty Trust Company of New York
 J. P. Morgan Securities Inc.
 J. P. Morgan Securities Inc.—Fixed Income Division
 Morgan, Keegan & Company, Inc.
 Morgan, Olmstead, Kennedy & Gardner Incorporated
 Morgan Stanley & Co. Incorporated
 MuniCorp of California
 Murphey Favre, Inc.
 Murphey, Marseilles, Smith & Nammack, Inc.
 Murphy & Durieu
 NB Clearing Corporation
 NASD Market Services Inc.
 National Financial Services Corporation
 National Westminster Bank N.J.
 National Westminster Bank USA
 Neuberger & Berman
 New Japan Securities International, Inc.
 New Windsor Associates, L.P.
 Newbridge Securities Inc.
 Newhard, Cook & Co. Incorporated

The Nikko Securities Co.
 International, Inc.
 Nippon Kangyo Kakumaru International, Inc.
 Nomura Securities International, Inc.
 The Northern Trust Company—Trust Income Collections
 John Nuveen & Co. Incorporated
 O'Connor & Associates
 O'Connor Securities
 Offerman & Co., Inc.
 Olde Discount Corporation
 Oppenheimer & Co., Inc.
 Outwater & Wells, Inc.
 Pacific Brokerage Services, Inc.
 Pacific Stock Exchange Specialist Account
 ABD Securities Corporation
 AGF Securities Inc.
 Adams-Fastnow Company, Inc.
 Bateman Eichler, Hill Richards Incorporated
 The Chicago Corporation
 Crowell, Weedon & Co.
 D. A. Davidson & Co., Inc.
 Donaldson, Lufkin & Jenrette Securities Corporation
 Easton & Co.
 Garat & Co.
 Goldberg Securities, Inc.
 Shiels Hoelscher & Co.
 Hopkins, Harbach & Co.
 Jefferies & Company, Inc.
 K. J. Keeley & Co. Inc.
 Ronald E. Melville, Inc.
 Merrill Lynch Specialists Inc.
 Mitchum Jones & Templeton Inc.
 LAQ-PSE LA SCOREX
 PQ-PSE SF SCOREX
 PaineWebber Specialists Inc.
 Post 63 Partners
 Seidler Amdec Securities Inc.
 Shearson Lehman Brothers, Inc.
 TCW Inc.
 Wedbush Securities, Inc.
 Weeden & Co. L.P.
 Don C. Whitaker Inc.
 L. W. Wilson & Co., Inc.
 Yamaichi International (America), Inc.
 PaineWebber Incorporated
 S. C. Parker & Co., Inc.
 Pembroke Clearing Corporation
 Pershing Division of Donaldson, Lufkin & Jenrette Securities Corporation

Pflueger & Baerwald Inc.
 Carl H. Pforzheimer & Co.
 Piper, Jaffray & Hopwood Incorporated
 Porter, White & Yardley, Inc.
 Preferred Technology, Inc.
 Prescott, Ball & Turben, Inc.
 Prudential-Bache Securities Inc.
 Purcell, Graham & Co.
 Q & R Clearing Corporation
 E. J. Quinn & Co., Inc.
 F. P. Quinn & Co.
 RAF Financial Corporation
 RBC Dominion Securities Corporation
 R.F.G. Co.
 R.J. Stock Lending
 RSF Partners
 T. J. Raney & Sons, Inc.
 Rauscher Pierce Refsnes, Inc.
 Raymond, James & Associates, Inc.
 W. H. Reaves & Co., Inc.
 Refco Securities, Inc.
 Refco Securities, Inc./Stock Loan
 Regional Clearing Corp.
 Reich & Co. Inc.
 Richardson Green Shields Securities Inc.
 M. Rimson & Co., Inc.
 Robb, Peck, McCooney Clearing Corporation
 Robertson, Colman & Stephens
 Rodman & Renshaw, Inc.
 Roney & Co.
 Roosevelt & Cross, Incorporated
 Rose & Company Investment Brokers, Inc.
 L. F. Rothschild and Co. Incorporated
 Roulston Research Corp.
 Ryan, Beck & Co.
 SBCI Swiss Bank Corporation
 Investment banking Inc.
 Sage Clearing Corporation
 Sage, Ruty & Co., Inc.
 Salomon Brothers Inc
 M. A. Schapiro & Co., Inc.
 Charles Schwab & Co., Inc.
 ScotiaMcLeod (USA) Inc.
 Scott & Stringfellow, Inc.
 Seasongood & Mayer
 Securities Settlement Corporation
 Security Pacific Clearing & Services Corp.
 Security Pacific Loan Group
 Morton Seidel & Co., Inc.
 Seligman Securities, Inc.
 Shatkin Investment Corp.
 Shatkin-Lee Clearance
 Shatkin-Lee Securities Co.
 Shearson Lehman Hutton Inc.
 Smith Barney, Harris Upham & Co. Incorporated
 Smith, Moore & Co.
 Smith New Court, Carl Marks Inc.
 Southwest Securities Incorporated
 Spear, Leeds & Kellogg
 Spear Securities & Co., Inc.

Participating Organizations (continued)

(as of December 31, 1988)

State Street Bank and Trust Company, N.A.
R. J. Steichen & Co.
Stern & Kennedy
M. L. Stern & Co., Inc.
Sterne, Agee & Leach, Inc.
Stifel, Nicolaus & Company Incorporated
Stock Clearing Corporation of Philadelphia
BHC Securities, Inc.
Susquehanna Investment Group
StockCross, Inc.
Stokes, Hoyt & Co.
Stone & Youngberg
Street Securities Co.
J. Streicher & Co.
The Stuart-James Company, Inc.
Surro & Co. Incorporated
Henry F. Swift & Co.
Swiss American Securities, Inc.
Thomson McKinnon Securities Inc.
Timber Hill, Inc.
The Toronto-Dominion Bank
Transatlantic Securities Company
Tucker, Anthony & R. L. Day, Inc.
UBS Securities Inc.
Underwood, Neuhaus & Co., Incorporated
Unified Management Corporation
United Missouri Bank of Kansas City, N.A.
United States Trust Company of New York
Universal Securities Corporation
Vail Securities Investment, Inc.
Van Kampen Merritt Inc.
W & D Securities, Inc.
WSCC-Mutual Funds
WSI Stock Loan
Wachtel & Co., Inc.
Wagner, Stott & Co.
Wagner Stott Clearing Corp.
Wagner Stott Clearing Corp./Cohen Feit & Co.
Wall Street Clearing Company
Wall Street Equities, Incorporated
Wall Street Trust, A Bank of New York Division
S. G. Warburg & Co., Inc.
Waterhouse Securities Inc.
Weber, Hall, Sale & Associates, Inc.
Wechsler & Krumholz, Inc.
Wedbush Securities, Inc.
Weiss, Peck & Greer
H. G. Wellington & Co., Inc.
Wells Fargo Bank, N.A.
Wheat, First Securities, Inc.
Thomas F. White & Co., Inc.
Williams Securities Group, Inc.
Wilshire Associates
Wolfe & Hurst Bond Brokers, Inc.
Wood Gundy Corp.
Yamaichi International (America), Inc.
Ziegler Thrift Trading, Inc.

For Municipal Comparison Only

Acker, Wolman Securities Corp.
Allied Bank of Texas
M. E. Allison & Co., Inc.
American Municipal Securities Inc.
American National Bank—St. Paul
American National Bank & Trust Company of Chicago
American Security Bank, N.A. (Washington, D.C.)
AmSouth Bank, N.A.
BancTexas Dallas N.A.
Bank IV Wichita, N.A.
Bank of America, BIRD
Dealer—Portfolio
Bank of Boston Connecticut
Bank of California
Bank of Hawaii
Bank of New England, N.A. Dealer Bank
Bank of Oklahoma, N.A.
Bank One, Indianapolis, N.A.
Bank South, N.A. (Atlanta)
Bankers' Bank of Wisconsin
Bankers Trust Company
Adams, McEntee & Company
BGK Securities Co.
Cantor, Fitzgerald & Co., Inc.—Retail Dealer
Carty & Company, Inc.
Citizens First National Bank of New Jersey
Citizens Trust Company
Crestar Bank
Duncan-Williams, Inc.
Faherty, Aliaga & Co., Incorporated
First Commercial Bank of Little Rock
First Interstate Bank of Nevada, N.A.
First Wisconsin National Bank of Milwaukee
Fleet National Bank
Grigsby, Brandford & Co., Inc.
The Leedy Corporation
Midlantic National Bank
E. A. Moos & Co. Incorporated
National City Bank, Cleveland
Pacifcorp Capital Securities, Inc.
D. A. Pincus & Co., Inc.
R. Seelaus & Co., Inc.
Southeastern Municipal Bonds, Inc.
Sterling, Grace Municipal Securities Corporation
Strahsmeier Securities Co.
The Summit Trust Company
Tollner & Bean, Inc.
Wheeler Municipals Corp.
Bankers Trust Company—Investment Dealer

Barnett Bank of Jacksonville, N.A.
Barr Brothers & Co., Inc.
BayBank Boston, N.A.
Branch Banking & Trust Co.
K. R. Butler, Inc.
C & S National Bank/Dealer
Cain Brothers, Shattuck & Company
Cal State Securities Corp.
Cantor, Fitzgerald Municipal Brokers, Inc.
Cape Cod Bank & Trust Co.
Capital Markets Corporation
Carolan & Co., Inc.
Centerre Bank, N.A. St. Louis
Central Bank of Denver
Central Bank of the South
The Central Trust Co. N.A. Cincinnati
Chapelaine & Co.
Chase Lincoln First Bank, N.A.
Chemical Bank—Municipal Dealer
Citicorp Securities Markets, Inc.
Citizens Fidelity Bank & Trust Company (Louisville, KY)
City National Bank, Beverly Hills, California
Colorado National Bank of Denver
Comerica Bank—Detroit
Commerce Bank of Kansas City, N.A.
Commerce Bank of St. Louis, N.A.
Commercial National Bank of Peoria
Connecticut National Bank—Investment Dealer
Connors & Company
R. W. Corby & Company, Inc.
Country Club Bank, Kansas City
Crews & Associates, Inc.
Dahlke & Company, Inc.
Denver National Bank—Investment Dept.
Deposit Guaranty National Bank, Jackson, MS
The Depository Trust Company
First National Bank of Louisville
Manufacturers National Bank of Detroit—Municipal Bond Dept.
Star Bank, N.A.
Wachovia Bank & Trust Company, N.A.
Ladd Dinkins & Company
Discount Corporation of New York Municipals
Doley Securities Inc.
Dominion Bank, N.A. (Roanoke, VA)
Douglas & Co. Municipals, Inc.
Harry Downs & Co., Inc.
Clifford Drake & Company, Inc.
Duke McElroy & Company, Inc.
Egan, Marrin & Rubano, Inc.
Ehrlich-Bober & Co., Inc.
Equibank, N.A.
Essex Company
W. N. Estes & Company, Inc.
European American Bank
The Exchange National Bank of Chicago
Fidelity Bank, N.A.
The Fifth Third Bank
First American Bank of Georgia, N.A.

First American National Bank—Nashville
First Bank (N.A.) Milwaukee
First Charlotte Corporation
First Citizens Bank & Trust Company
First City National Bank of Houston—Safekeeping
First Commercial Bank
First Fidelity Bank, N.A.
New Jersey/Municipal Dealer
First Interregional Equity Corp.
First Interstate Bank of Arizona, N.A.
First Interstate Bank of California—Dealer Bond Department
First Interstate Bank of Denver, N.A.
First Interstate Bank of Oklahoma City—Investment Division
First Interstate Bank of Oregon, N.A.
First Interstate Bank of Washington—Bank Investment Department
First Missouri Bank & Trust Company
First National Bank in Palm Beach—Bond Department
First National Bank of Boston—Dealer
First National Bank of Chicago
First National Bank of Commerce (New Orleans)
First National Bank of Maryland
First National Bank of Minneapolis—Bond Dealer
First National Bank of Springfield
The First National Bank & Trust Co. of Tulsa—Investment Division
First of America Bank—Detroit, N.A.
First Security Bank of Utah, N.A.
First Southern Securities, Inc.
First Tennessee Bank, N.A.
First Union National Bank of Florida
Florida National Bank (Jacksonville)
Fox Reusch & Co., Inc.
The Frazer Lanier Company
Frost National Bank—Bond Dept.
GIMB
Glickenhau & Co.
Glickenhau—New Jersey
A. F. Green & Co., Inc.
Halliburton & Associates, Inc.
Halpert and Company, Inc.
J. B. Hanauer & Co.
Harper, McLean & Company
Chester Harris & Co., Inc.
Hattier, Sanford & Reynoir
William R. Hough & Co.
The Huntington National Bank
Hutchinson, Shockey, Erley & Co.
Independent State Bank of Minnesota
Indiana National Bank
Irving Trust Company
The First National Bank in Albuquerque
The Provident Bank
United Bank of Arizona

JMC Securities, Inc.
 Johnston, Brown, Burnett & Knight, Inc.
 Lex Jolley & Co., Inc.
 Joe Jolly & Co., Inc.
 Kirchner, Moore & Company
 W. L. Knox & Company
 LaSalle National Bank/Dealer Operations
 Leberthal & Co., Inc.
 David Lerner Associates, Inc.
 Liberty National Bank and Trust Company (Louisville, KY)
 Liberty National Bank & Trust Company Investment Dept. (Oklahoma City, OK)
 MBank Austin N.A.
 M&I Marshall & Ilsley Bank
 Manufacturers Hanover Trust Company
 Alamo National Bank
 The Arizona Bank
 Banco Popular de Puerto Rico
 BankOhio National Bank
 Bank of Virginia
 Bankers Trust of South Carolina
 Boatmen's National Bank of St. Louis
 Central Fidelity Bank
 Central Fidelity Bank—Investments
 Central Fidelity Bank (Lynchburg, VA)
 Corpus Christi National Bank
 The First National Bank of Shreveport
 First National Bank of South Carolina
 First Union National Bank
 Hibernia National Bank in New Orleans
 Imperial Bank (Los Angeles)
 Landmark First National Bank
 Old Stone Corporation
 Pittsburgh National Bank
 South Carolina National Bank
 Southeast Bank, N.A.
 Southtrust Bank of Alabama, N.A.
 Sovran Bank, N.A.
 Sovran Bank, N.A.—Trading Account
 UnibancTrust
 United Bank and Trust Company
 Manufacturers and Traders Trust Co.—Muni Trading & Safekeeping
 Marine Bank, N.A. (Milwaukee)
 Marine Midland Bank—New York
 First National Bank of Toms River, NJ
 Second National Bank of Saginaw
 United Jersey Bank
 Mark Twain National Bank (St. Louis, MO)
 Hugo Marx & Co., Inc.
 Masterson & Company
 McLaughlin, Piven, Vogel Inc.
 McLinney and Company
 Mellon Bank (East), N.A.
 Mellon Bank, N.A.
 Mercantile Bank, N.A.
 Merchants National Bank & Trust Company of Indianapolis
 Merit Financial Corporation

Meuse, Rinker, Chapman, Endres & Brooks
 N. D. Meyer & Co., Inc.
 Michigan National Bank of Detroit
 Miller & Schroeder Financial Inc.
 Municipal Investors Service, Inc.
 NCNB National Bank of Florida
 NCNB Texas
 National Bank of Commerce Trust & Savings Association—Dealer
 National Bank of Detroit
 Newman and Associates, Inc.
 Norstar Bank, N.A./Buffalo
 Norstar Bank of Upstate New York (Albany)
 Norwest Investment Services
 O'Brien & Shepard, Inc.
 Oregon Bank
 J. A. Overton & Co.
 Park Investment Corporation
 Philadelphia National Bank—Corestates Capital Markets Group
 Rainier National Bank
 Rhode Island Hospital Trust National Bank
 Rickel & Associates
 Rogers & Lamb
 SSB—Bank Portfolio
 Scheetz, Smith & Company, Inc.
 Schmidt Securities, Inc.
 Seattle First National Bank
 Seattle Northwest Securities Corporation
 SecuriCorp, Inc.
 Security Bank of Kansas City
 Security Pacific Clearing & Services Corp.
 Adams, Block & Co. Securities
 Allison, Rosenblum & Hannahs, Inc.
 James Baker & Company
 Berghoff, Marsh & Company
 A.F. Best Securities, Inc.
 Bryan, Worley & Co., Inc.
 Capitol Municipal Securities, Inc.
 Chilton & O'Connor, Inc.
 Langdon P. Cook & Co. Incorporated
 Dayton, Kahn, Heppe, Hancock & Co.
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 Emmet & Co., Inc.
 FinSer Investment Company
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 First Miami Securities
 Gibraltar Securities Co.
 Griffin, Kubik, Stephens & Thompson, Inc.

Hammond & Botzum, Incorporated
 Henry/Kearns Municipals, Inc.
 A. D. Jack & Company
 McGowan, O'Meara & Company, Inc.
 Mid-State Securities Corp.
 National Bank of Commerce (Birmingham, AL)
 National Bank of Commerce (Memphis, TN)
 One National Bank—Investments
 Leo Oppenheim & Co., Inc.
 Pacific Securities Inc.
 Plansmith Securities, Inc.
 R'H Investment Corporation
 RMG Capital L.P.
 Arch W. Roberts & Co.
 Russell, Rea & Zappala, Inc.
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 Spelman & Co., Inc.
 Townes & Co., Inc.
 Vining-Sparks Securities, Inc.
 Michael A. Weisser, Inc.
 Westcap Securities, Inc.
 A. H. Williams & Co., Inc.
 B. C. Ziegler & Company
 Ziegler Securities, Inc.
 Security Pacific National Bank
 Shawmut Bank—Investment Division
 Shawmut Worcester County Bank, N.A.
 Signet Bank/Virginia
 Simmons First National Bank of Pine Bluff
 Herbert J. Sims & Co., Inc.
 Sisung Securities, Inc.
 R. W. Smith & Associates, Inc.
 Society National Bank
 Sovran Bank/Central South
 J. W. Sparks Municipals, Inc.
 Stoeber, Glass & Co. Inc.
 Texas American Bank, N.A./Fort Worth
 Texas Commerce Bank, N.A.
 Texas Independent Bank
 Third National Bank in Nashville
 Thorn, Alvis, Welch, Inc., Investment Securities
 Thornton, Farish & Gauntt
 Titus & Donnelly Inc.
 Trust Company Bank—Investment Banking Division
 Trustmark National Bank
 U.S. Bank of Washington National Association
 UnibancTrust Company
 Union Bank—Treasury Department
 Union Planters Investment Bankers Group
 United Bank of Denver, N.A.
 United States Bank of Oregon/Dealer
 Valley National Bank of Arizona
 St. Denis J. Villere & Co.
 Wall Street Trust, A Bank of New York Division
 Jefferson Guaranty Bank
 Maryland National Bank
 NCNB National Bank of North Carolina—a/c Cape Securities

Wells Fargo Bank, N.A.—Funding Group
 Westpac Banking Corporation
 R. D. White & Co., Inc.
 Whitney National Bank of New Orleans
 Wolfe & Hurst Bond Brokers, Inc.—Muni Division
 Worthen Bank & Trust Co., N.A., (Little Rock, AR)

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