Harvard Business School
The Finance Club
October 17, 1986

Insider Trading, Program Trading
and Internationalziation of the Securities Markets

John Shad

This afternoon I would like to highlight some aspects of insider trading, computerized arbitrage and hedging activities, and the increasing internationalization of the securities markets - and invite your comments as we go along.

Insider Trading

In the summer of 1981 articles in Fortune and other leading publications stated that insider trading was so pervasive nothing could be done about it. Some took such articles to be a license to engage in insider trading.

However, within the past two years - with the support of the business and financial community, the investing public, the Administration and Congress - the SEC's ability to expose and prosecute inside traders has been greatly enhanced by electronic market surveillance systems, transaction audit trails, heavy fines and growing cooperation from abroad. In addition to the United States, insider trading is now illegal in Canada, Japan, the UK, France, Hong Kong and other countries, and legislation is pending in Switzerland to make it a criminal offense.

The recent Dennis Levine, Santa Fe and many other cases demonstrate that it has become increasingly difficult for inside traders to hide - at home or abroad - and that those who engage in such activities are assuming enormous risks of heavy fines, imprisonment and disgrace.

Some contend that insider trading tends to move stocks in the "right" direction and that it should be legalized. What do you think? (Discussion).

A number of defendants in recent insider trading cases have been individuals in their early 30s, who are graduates of leading law and business schools. Most have had six figure incomes and very promising careers ahead of them. I am often asked what went wrong? If the temptations have become too great; if it is simply the challenge of seeing if they can get way with it; or if there has been a change in moral attitudes. What do you think? (Discussion).

Program Trading or computerized arbitrage and hedging activities, have been criticized for increasing market volatility - particularly on "Triple Witching" expiration Fridays, which occur every 90 days when options and futures on stock indices and options on stocks all expire on the same Friday - as well as during interim periods, such as last month - when on September 4th, the Dow soared 38 points to a new high - 1,919 - and on September 11th and 12th, when it plunged 120 points on record volume - 488,000,000 shares.

The SEC has resisted pressures for a "quick fix", preferring to expose the facts - and the imbalances of orders on expiration Fridays - and give the marketplace a chance to respond.

The market's response to the predictable counter moves following expiration Fridays should dampen volatility. When the market has moved up or down 30 to 40 points on an expiration Friday, it has typically moved 15 to 20 points in the opposite direction within the first hour on the following Monday. This has amounted to over a 1% profit opportunity over the weekend. Execution costs prevent individuals from taking advantage of these modest swings, but professionals can do so.

It is not generally appreciated that less than a point move in each of the 30 Dow Jones stocks in the same direction results in a 30 to 40 point move in the Dow Jones Industrial Average. Thus, the Dow magnifies the market's volatility.

Another fact that is not generally appreciated is that the bulk of the speculation in index options and futures is by professionals on the floors of the exchanges - not by the public. Rough estimates of the trading in index options and futures breakdown as follows:

Floor traders	50%
Arbitrageurs and hedgers	25%
The public and others	25%

The benefits of computerized arbitrage include greater market efficiency. Transactions are telescoped into minutes that would otherwise be spread over days or weeks. Also, arbitrage brings the indices into line with each other and the underlying stocks. Such arbitrage activities are reflected in hundreds of thousands of fractional price changes throughout the 90 days - which increase the efficiency and fairness of the securities markets for the benefit of investors.

In addition, index options and futures permit investors, underwriters, corporations and others to hedge stock market risks at a fraction of the prior costs of doing so, and in multimillion dollar amounts that were not previously possible. They also increase the breadth and liquidity of the markets in the underlying securities.

The recent volatility should be put in perspective. Since August 1982, we have enjoyed one of the longest and strongest stock, bond and new issue markets in history. Over the past four years, the Dow Jones Industrial Average has climbed over 145% to last month's all time high. Interim reactions have been mild. Generally, the higher the market, the greater the volatility. The 120 point break over two days last month amounted to 6.5%, as compared with over 12% on one day in 1929.

Postmortem

Some believe the September 11th and 12th break began in London - on rumors that the Commerce Department's soon-to-be-released Retail Sales and Producer Price indices would be much stronger than expected - which suggested a rekindling of inflation and higher interest rates. In any case, many felt the market was high - that a reaction was overdue - and that any excuse would have triggered a sell-off.

On September 11th, the sensitive London floating rate bond market sold-off. Later that morning, at the 9:30 a.m. opening in New York, Treasury futures were down sharply. And more important, options and futures on the stock indices opened two to four points below the prices of the underlying shares - which afforded computer arbitrage programs an exceptional opportunity to "lock-in" profits by instantly selling stocks and buying index options and futures. Index fund computer programs did the same thing, which is one of the few ways index funds can out perform the averages.

Other institutions' computerized "portfolio insurance" (i.e., hedging) programs began selling index options and futures. Some floor traders rolled out of September into December options and futures. All of which put additional pressures on the market. Thirty-five Chicago Mercantile Exchange members failed.

<u>Imbalance Exposure</u>

On September 10th, in order to expose large order imbalances on the next expiration Friday, September 19th, the SEC requested the New York Stock Exchange to urge its members to enter their Market-on-the-Close orders in the 30 Dow stocks by 3:30 p.m. and for the specialists to put the imbalances on the ticker tape - to attract orders on the other side. This experiment worked well on September 19th. The imbalances in all 30 Dow stocks appeared on the tape by 3:36 p.m. - and were significantly dissipated by the 4:00 p.m. close, which was a non-event. However, many large positions in index options and futures had been closed out or rolled over during the September 11th and 12th reaction. So it was not an adequate test.

Additional alternatives suggested to dampen volatility include:

- settling options and futures on expiration Fridays at opening, instead of closing prices;
- settling at average prices on expiration Fridays;
- increasing the net capital and/or margin requirements of floor traders;
- limiting securities firms' ability to compete with their clients in the options and futures markets;
- lowering or telescoping position limits on index options and futures.

The SEC is analyzing these and other alternatives, with a view to dampening volatility, but with minimum interference with market forces.

Does program trading result in net benefits or disadvantages to small investors? (Discussion).

Internationalization of the Securities Markets

The benefits of the rapidly increasing internationalization of the securities markets are enormous. The challenges are also great and immediate.

The benefits

The benefits include the dramatic increase in the international mobility of capital. High-speed, low cost telecommunications are enabling investors and corporations to shop worldwide for the most attractive investment opportunities and sources of capital at any moment in time. Increasing competition and the growing breadth, depth and liquidity of the markets are reducing execution and financing costs for the benefit of investors, government and corporate issuers.

All of which are encouraging broader public participation in the securities markets through mutual and pension funds, as well as direct investment. It is notable in this regard that those free world countries which enjoy the broadest public participation in their securities markets, also generally enjoy the greatest political and economic stability - which in turn attracts additional capital, both from within and from abroad.

The strong growth of the international securities markets has been both a product and a stimulator of the worldwide recovery from the 1982 recession. Other factors include the significant declines in the price of oil, interest rates and inflation, the reduction of regulatory impediments and the increasing privitization of industry abroad.

Innovative new instruments have reduced the cost and increased the liquidity of international financings. Low cost bank guaranteed interest rate and currency swaps permit issuers to borrow in one currency and make interest and principal payments in another. Swaps have grown phenomenally - from a billion dollars in 1981 to over $170 billion last year. Over half of Eurobond offerings now include swap arrangements and about a third consist of floating rate issues.

The United Kingdom's privitization program has included the highly successful £3.9 billion multinational offering of British Telecom - by far the largest equity offering in history.

Last year U.S. companies raised $122 million in the Euroequity market. This year they have already raised over six times that amount.

Within the past four years, the annual volume of foreign transactions in U.S. stocks has doubled (to $160 billion) and U.S. transactions in foreign stocks have tripled (to $50 billion). About 10% of the transactions on the New York Stock Exchange now originate abroad.

International linkages

There are presently nearly 500 companies that have shares trading actively in more than one country, which is over a 100% increase in less than four years. The next four years may well witness over a fivefold increase in the number of companies that have shares actively trading around the clock and the world, through a grid of international linkages.

All U.S. stock exchanges and some Canadian and U.S. exchanges are now electronically linked. Other major markets are discussing linkages. The London Stock Exchange and the National Association of Securities Dealers have begun the first transatlantic exchange of stock quotations. Reuters is making Instinet's U.S. stock execution facilities available in Europe.

The elimination of fixed commissions and the restructuring of the British securities industry on October 27th - the "Big Bang" - has already had significant ramifications. Major U.S. and foreign securities firms and banks are substantially expanding their London operations and interests. The German, Dutch and Swiss markets have reduced their regulations and more such moves are anticipated as competition intensifies.

The recent admission of six foreign firms to the Tokyo exchange has improved foreign access to the world's second largest exchange. A projection of the relative growth rates, suggests that the Tokyo exchange may be larger than New York by the mid-90's.

Major challenges

Major challenges include the international balance of payments and government debt restructurings. Initiatives by Treasury Secretary Baker are addressing these and other major issues. The ballooning volume of off-balance sheet bank guaranteed swaps and other credits are coming under increasing scrutiny by central bankers and bank regulators.

Challenges being addressed by the SEC include the international securities clearance, settlement, disclosure, surveillance and enforcement systems and practices.

International securities clearance and settlement systems have not kept pace with the rapid increase in the volume of transactions. Electronic linkages are now operating between U.S. and Canadian clearance systems and are being actively pursued abroad, but much remains to be done. Settlement cycles range from two days in Canada and West Germany, to over a month in many countries. Some markets are unable to reconcile initially as much as 40% of their daily transactions and take months to deliver securities. The attendant high costs and serious risks are major impediments to the growth of many countries' capital markets.

Surveillance and enforcement

The potential for international securities fraud has increased through the use of multiple nominee accounts in different countries, the leverage of stock options, and by high-speed communications.

It is in the interest of all nations to expose and prosecute that fringe element, who would defraud legitimate investors. Countries that harbor criminals drive away legitimate investors. Criminals rarely invest in secrecy havens. They merely use them to conceal their activities in other countries.

All of us bear the cost of such abuse. In addition to multimillion dollar frauds, it results in higher insurance and other costs, and the inhibition of investors. It takes years to build investors' confidence in the integrity of securities markets. Confidence that can be shaken or destroyed by market manipulations, insider trading, false and misleading financial disclosures, Ponzi and other schemes. Such abuses are exacerbated if they can be conducted with impunity from behind foreign securities secrecy and blocking laws. The U.S. does not have such laws.

Bilateral agreements

Bilateral agreements are expediting international law enforcement. They include recent SEC Accords and Understandings with Switzerland, Canada, Japan, the UK and others. The logical extension of these bilateral agreements will ultimately be multilateral agreements among virtually all marketplaces.

Market accessibility

Another challenge is to increase access to world markets by legitimate issuers, securities firms and investors, without compromising investor protections.

The SEC is considering a reciprocal approach under which so-called "world class" corporations would be permitted to do public offerings of investment grade debt in the U.S. and participating countries, under prospectuses which comply with such companies' domestic requirements, subject to certain minimum provisions. A similar approach is also being considered for certain international rights and exchange offerings.

Multinational efforts

To address these challenges, the SEC initiated at the July conference in Paris of the International Association of Securities Commissions - and the 50 nation membership strongly supported - the formation of multinational committees to accelerate:

- the automation of securities clearance and settlement systems;
- the sharing of enforcement information between nations;
- the access of foreign issuers, broker-dealers and investors to each others' markets;
- and the growth of developing nations' securities markets.

Effective responses to these challenges are within reach.

There are many barriers to the fair and free flow of capital, but one of the millennia to which mankind can aspire is that great day when capital will be permitted to flow with the ease of water into every nook and cranny of economic opportunity - first within America, next throughout the free world, and ultimately throughout the earth.

As our worldwide economic interests and dependencies are more closely bound together, all mankind will enjoy greater peace, prosperity and opportunity.

I would appreciate your comments and be pleased to respond to any questions. (Discussion).