Mr. Greenspan offers some considerations as a guide for government decisions on regulating the financial markets Remarks by Chairman of the Board of Governors of the US Federal Reserve System, Mr. Alan Greenspan, at the Financial Markets Conference of the Federal Reserve Bank of Atlanta held in Coral Gables, Florida on 21/2/97.

I am pleased to participate once again in the Federal Reserve Bank of Atlanta's annual Financial Markets Conference. As in previous years, the Reserve Bank has developed a conference program that is quite timely. Changes in technology have permitted the development in recent years of increasingly diverse financial instruments and intensely competitive market structures. The rapid evolution of products and markets has led many to conclude that market regulatory structures, many of which were established in the 1920s and 1930s, have become increasingly outdated. Some see new products and markets not covered by government regulation and fear the consequences of so-called "regulatory gaps." Others see old government regulations applied to new instruments and markets and fear the unintended consequences of what seems unnecessary and burdensome regulation.

Nowhere have these tensions been more evident than in the ongoing debate over the appropriate government regulation of derivative contracts, a debate which has varied in intensity but has never fully subsided for at least ten years. Recent efforts by members of the Senate Agriculture Committee to clarify and rationalize the regulation of derivative contracts under the Commodity Exchange Act have once again placed these contentious issues on the front burner. In my remarks today I shall proffer a set of considerations that I find quite valuable as a guide to decisions about the need for government regulation of financial markets. I shall then review the history of government regulation of derivative contracts and markets in the United States and consider the current regulatory structure for those products and markets in light of these considerations.

## Market Regulation

I would argue that the first imperative when evaluating market regulation is to enunciate clearly the public policy objectives that government regulation would be intended to promote. What market characteristics do policymakers seek to encourage? Efficiency? Fair and open access? What phenomena do we wish to discourage or eliminate? Fraud, manipulation, or other unfair practices? Systemic instability? Without explicit answers to these questions, government regulation is unlikely to be effective. More likely, it will prove unnecessary, burdensome, and perhaps even contrary to what more careful consideration would reveal to be the underlying objectives.

A second imperative, once public policy objectives are clearly specified, is to evaluate whether government regulation is necessary for those purposes. In making such evaluations, it is critically important to recognize that no market is ever truly unregulated. The self-interest of market participants generates private market regulation. Thus, the real question is not whether a market should be regulated. Rather, the real question is whether government intervention strengthens or weakens private regulation. If incentives for private market regulation are weak or if market participants lack the capabilities to pursue their interests effectively, then the introduction of government regulation may improve regulation. But if private market regulation is effective, then government regulation is at best unnecessary. At worst, the introduction of government regulation may actually weaken the effectiveness of regulation if government regulation is itself ineffective or undermines incentives for private market regulation. We must be aware that government regulation unavoidably involves some

element of moral hazard -- if private market participants believe that government is protecting their interests, their own efforts to protect their interests will diminish to some degree.

Whether government regulation is needed, and if so, what form of government regulation is optimal, depends critically on a market's characteristics. A "one-size-fits-all" approach to financial market regulation is almost never appropriate. The degree and type of government regulation needed, if any, depends on the types of instruments traded, the types of market participants, and the nature of the relationships among market participants. To cite just one example, a government regulatory framework designed to protect retail investors from fraud or insolvency of brokers is unlikely to be necessary -- and is almost sure to be suboptimal -- if applied to a market in which large institutions transact on a principal-to-principal basis.

Recognizing that a one-size-fits-all approach is seldom appropriate, it may be useful to offer transactors a choice between seeking the benefits and accepting the burdens of government regulation, or forgoing those benefits and avoiding those burdens by transacting in financial markets that are only privately regulated. In such circumstances, the privately regulated markets in effect provide a market test of the net benefits of government regulation. Migration of activity from government-regulated to privately regulated markets sends a signal to government regulators that many transactors believe the costs of regulation exceed the benefits. When such migration occurs, government regulators should consider carefully whether less regulation or different regulation would provide a better cost-benefit tradeoff without compromising public policy objectives.

## Historical Development of U.S. Government Regulation of Derivative Markets

Before evaluating the current regulation of derivatives in light of these considerations, it is quite useful to know something of the history of these instruments and their regulation. Derivative contracts (forward contracts and options) appear to have been utilized throughout American history. Indeed, it will probably come as a surprise even to this audience that 15 to 25 percent of trades on the New York Stock Exchange in its early years were time bargains, that is, forward contracts, rather than transactions for cash settlement (in those days, same-day settlement) or regular-way settlement (next-day settlement). In the case of commodities, forward contracts for corn, wheat, and other grains came into common use by 1850 in Chicago, where they were known as "to arrive" contracts. The first organized futures exchange in the United States, the Chicago Board of Trade, evolved through the progressive standardization of the terms of "to arrive" contracts, including lot sizes, grades of grain, and delivery periods. Trading apparently was centralized on the Board of Trade by 1859, and in 1865 it set out detailed rules for the trading of highly standardized contracts quite similar to the grain futures contracts traded today.

The first recorded instance of federal government regulation of derivatives was the Anti-Gold Futures Act of 1864, which prohibited the trading of gold futures. The government had been unhappy that its fiat currency issues, the infamous greenbacks, were at that time trading at a substantial discount to gold. Unwilling to accept this result as evidence of failure of the government's monetary policies, Congress concluded that it was evidence of a serious failure of private market regulation. In the event, Congress's action was followed by a further sharp drop in the value of the greenbacks. Although it took the government many years to restore monetary policy to a sound footing, it took Congress only two weeks to conclude that its prohibition of gold futures was having unintended consequences and to repeal the act.

It has been the trading of agricultural futures, however, that from its inception has produced calls for government intervention. Throughout the late nineteenth and early twentieth centuries, farmers were often opposed to futures trading, particularly during periods when prices of their products were low or declining. They presumed that dreaded speculators were depressing their prices. The states were the first to respond to calls for government regulation of futures. For the most part, state legislation on futures was limited to prohibitions on bucket shops, that is, operations that purport to act as brokers of exchange-traded futures but "bucket" rather than execute their clients' trades. An Illinois statute of 1874 signaled early concerns about market integrity. The statute criminalized the spreading of false rumors to influence commodity prices and attempts to corner commodity markets.

After its misadventure with futures regulation during the Civil War, the federal government appears not to have given further consideration to regulating futures trading until 1883, when a bill was introduced in Congress to prohibit use of the mails to market futures. Thereafter, repeated efforts were made to regulate or prohibit trading of futures and options on agricultural products. When the Agriculture Department reviewed the Congressional Record in 1920, it found that 164 measures of this sort had previously been introduced. These efforts culminated in passage of the Futures Trading Act of 1921. That act was promptly declared unconstitutional by the Supreme Court, on the grounds that it was a regulatory measure masquerading as a tax measure. But in 1922 Congress restated the purpose of the 1921 act as "an act for the prevention and removal of obstructions and burdens upon interstate commerce in grain, by regulating transactions on grain futures exchanges," and renamed it the Grain Futures Act of 1922. As an explicitly regulatory measure, it was later upheld by the Court.

The objective of the Grain Futures Act was to reduce or eliminate "sudden or unreasonable fluctuations" in the prices of grain on futures exchanges. The framers of the act believed that such sudden or unreasonable fluctuations of grain futures prices reflected their susceptibility to "speculation, manipulation, or control." Moreover, such fluctuations in price were seen to have broad ramifications that affected the national public interest. Grain futures contracts were widely used by producers and distributors of grain to hedge the risks of price fluctuations. Futures prices also were widely disseminated and widely used as the basis for pricing grain transactions off the futures exchanges. Indeed, given the relative size of the agricultural sector of the time, fluctuations in futures prices no doubt had the potential to affect the economy as a whole.

It is not entirely clear that the view that futures trading was exacerbating volatility in agricultural prices was well-founded. To be sure, evidence abounds that market participants talked incessantly about corners and bear raids. Moreover, the design of the contracts may, indeed, have made such contracts susceptible to manipulation. However, empirical studies of more recent experience cast doubt on whether the use of derivatives adds to price volatility. And, while charges of market manipulation are heard to this day, they typically are difficult, if not impossible, to prove. Professional speculators were easy to blame for fluctuations in market prices that actually reflected fundamental shifts in supply or demand, as they are today. The market clearing process is a very abstract concept. It is sometimes far easier to envisage price changes as the consequence of individual manipulators. Indeed, for a lot of nineteenth-century ring traders, it was some measure of manhood (women were few) that they could squeeze or corner a market. The evidence suggests that this was largely Walter Middy-type fantasy.

In any event, the Grain Futures Act of 1922 established many of the key elements of our current regulatory framework for derivatives. In general, the act was designed to confine futures trading to regulated futures exchanges. The act made it unlawful to trade futures on

exchanges other than those designated as contract markets by the Secretary of Agriculture. The Secretary was permitted to so designate an exchange only if certain conditions were met. These included the establishment of procedures for recordkeeping and reporting of futures transactions, for prevention of dissemination of false or misleading crop or market information, and for prevention of price manipulation or cornering of markets. Finally, the act recognized the need to permit bona fide derivatives transactions to be executed off of the regulated exchanges; it explicitly excluded forward contracts for the delivery of grain from the exchange-trading requirement. Forward contracts were essentially defined as contracts for future delivery to which farmers or farm interests were counterparties or in which the seller, if not a farmer, owned the grain at the time of making the contract.

The next major piece of federal legislation affecting futures regulation was the Commodity Exchange Act (CEA) of 1936. As in the case of the Grain Futures Act, an important objective of the CEA was to discourage forms of speculation that were seen as exacerbating price volatility. In addition, the CEA introduced provisions designed primarily to protect small investors in commodity futures, whose participation had been increasing and was viewed as beneficial. These provisions included requirements for the registration of futures commission merchants (FCMs), that is, futures brokers, and for the segregation of customer funds from FCM funds. The CEA also expanded the coverage of futures regulation to cover contracts for cotton, rice, and certain other specifically enumerated commodities traded on futures exchanges, and prohibited the trading of options on commodities traded on futures exchanges.

The federal regulatory framework for derivatives market regulation then remained substantially unchanged until 1974, when Congress enacted the Commodity Futures Trading Commission Act. The act did not make any fundamental changes in the objectives of derivatives regulation. However, it expanded the scope of the CEA quite significantly. In addition to creating the Commodity Futures Trading Commission (CFTC) as an independent agency and giving the CFTC exclusive jurisdiction over commodity futures and options, the 1974 amendments expanded the CEA's definition of "commodity" beyond a specific list of agricultural commodities to include "all other goods and articles, except onions, . . . and all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in." In one respect, this was sweeping deregulation, in that it explicitly allowed the trading on futures exchanges of contracts on virtually any underlying assets, including financial instruments. Only onion futures, banned in 1958 as the presumed favorite plaything of manipulators, remained beyond the pale. In another respect, however, this was a sweeping extension of regulation. Given this broad definition of a commodity and an equally broad interpretation of what constitutes a futures contract, this change brought a tremendous range of off-exchange transactions potentially within the scope of the CEA. In particular, it could be interpreted to extend the broad prohibition on off-exchange trading of futures to an immense volume of diverse transactions that never had been traded on exchanges.

The potential for the legality of a wider range of transactions to be called into question did not go unnoticed during debate on the 1974 act. In particular, the Treasury Department proposed language excluding off-exchange derivative transactions in foreign currency, government securities, and certain other financial instruments from the newly expanded CEA. This proposal was adopted by Congress and is known as the Treasury Amendment. In proposing the amendment, Treasury was primarily concerned with protecting foreign exchange markets from what it considered unnecessary and potentially harmful regulation. The foreign exchange markets clearly have quite different characteristics from markets for agricultural futures -- the markets for the major currencies are deep and, as some central banks have learned the hard way, they are extremely difficult to manipulate.

Furthermore, participants in those markets, primarily banks and other financial institutions, and large corporations, would not seem to need, and certainly are not seeking, the protection of the CEA. Thus, there was, and is, no reason to presume that the regulatory framework of the CEA needs to be applied to the foreign exchange markets to achieve the public policy objectives that motivated the CEA. Indeed, the wholesale foreign exchange markets provide a clear and compelling example of how private parties can regulate markets quite effectively without government assistance.