

**LEGAL AND REGULATORY FRAMEWORK
FOR EXCHANGE TRADED DERIVATIVES**



**Emerging Markets Committee
of the
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INTRODUCTION

Risk exists in all markets. This has caused the participants in many markets to look for ways to manage risk. One way of doing this is with derivatives. As awareness of the usefulness of derivatives as risk management tools has grown, so have markets for derivatives. Futures and options exchanges and over-the-counter derivative markets are integral parts of virtually all economies which have reached an advanced state of economic development. These markets will be important parts of many other economies as they move into more advanced stages of development.

There are many similarities and many differences in the various derivative markets around the world. One of the similarities is that all derivative exchanges operate under some form of governmental regulation. The purpose of this report is to provide some guidance on the appropriate regulatory approach to those countries which are developing or plan to develop derivatives markets.¹

Six countries which have recently developed or which are actively engaged in developing derivatives markets have provided reports on their experiences and plans in this regard.² These documents reveal great similarities in the general approach to regulation. Underneath these similarities there are substantial differences in many specific areas, but these differences primarily reflect different ways of attempting to achieve the basic goals of financial regulation. They also reflect some differences in regulatory philosophy, particularly with respect to the role of self-regulation in achieving the regulatory goals.

GOALS OF REGULATION

The first issue which should be addressed when establishing a regulatory system is that of the purposes of regulation. This can be broken down into several questions: Why is regulation needed? When and where is regulation needed? What are reasonable (and attainable) goals of regulation? The answers to these questions involve an assessment of the likelihood that unregulated market activity will have socially undesirable consequences and of the likelihood that regulation will prevent these consequences at a reasonable cost. In economic terms, this means an assessment of the probability of market failure and benefit-cost analysis of regulations aimed at correcting any market failures.

¹ This report deals only with exchange-traded derivatives. The issue of the regulation of OTC derivatives, especially in a jurisdiction in which exchange-traded derivatives are regulated, is an important one; but is beyond the scope of this report.

² These countries are Brazil, Chinese Taipei, Korea, Malaysia, South Africa and Thailand.

There is widespread agreement that market integrity and efficiency, financial safety and integrity, and customer protection (fair treatment of customers) are critical to the success of any financial market. Anyone responsible for operating such a market, therefore, has strong incentives, independent of external regulation, to ensure that these conditions are present and that these conditions are apparent to all actual and potential users of the market. Some market participants, nevertheless, have incentives to take actions which compromise these goals. Both theory and experience show that regulation, properly implemented, can improve the probability that the desired levels of integrity and customer protection will be reached and maintained. Experience also demonstrates that a successful regulatory system can complement the incentives for self-regulation while reducing the incentives and opportunity for behavior which threatens the success and integrity of the market.

Market Integrity and Efficiency

Derivatives exchanges serve three important economic purposes: risk shifting, price discovery, and enhancing efficiency by providing a focal point where buyers and sellers can easily meet. None of these purposes can be properly served if prices on the exchanges do not accurately reflect the forces of supply and demand. Nor can they be served if buyers or sellers do not have confidence that prices do reflect these forces. That is, people will be unlikely to use the market if they do not believe in its integrity.

An obvious threat to market integrity is manipulation - a deliberate attempt to distort the market price. Many people also believe that prices in derivative markets can be excessively volatile or that they can increase the volatility of prices in the cash market. Historically, futures and options exchanges and their regulators have devoted substantial resources to ensuring that prices reflect supply and demand and to assuring market users that adequate safeguards exist against manipulation and other practices which may distort prices, the market's depth and liquidity, or market positions (such as fictitious trades and wash trades).

Financial Safety and Integrity

One of the distinctive features of a centralized derivatives exchange is that the exchange (or the exchange's clearinghouse) acts as a counterparty to every trade. Thus, those who use the exchange do not have to worry about the creditworthiness of the counterparties to their trades. In order to fulfill its responsibilities as a counterparty the exchange must establish a system for financial integrity and other means for guaranteeing trades which ensures that it has the financial capacity to satisfy its obligations to fulfill the terms of the contract. needed to make the payments it has promised to make. As in the case of market integrity, it is clearly in an exchange's self interest to establish a reputation for financial integrity. Otherwise, it will be difficult to attract customers. Regulatory oversight of the exchanges' activities in this area can ensure that the proper systems are in place, and it can give customers additional confidence in the exchange's financial integrity.

Another reason for regulatory attention to financial integrity is that financial problems on an exchange can have systemic (i.e., spillover) effects. That is, they can affect the integrity of the financial system. The failure of an exchange to guarantee performance on contracts may result in defaults on other exchanges and in other financial institutions. Thus, it is in the public interest to ensure that each derivatives exchange has taken the appropriate measures to ensure its own financial integrity.

Customer Protection and Fairness

Customers trading on derivatives exchanges entrust their funds to financial intermediaries. They receive information about the nature of the risks of these transactions from those with an interest in inducing customers to engage in such transactions. Accordingly, firms, exchanges, self-regulatory agencies and governmental regulators must establish regulations addressing customer protection and fairness. These regulations typically include procedures to ensure the fitness and competency of those who deal with customers, appropriate disclosures to customers, documentation to ensure customer authorization for transactions, sales practice rules intended to prohibit misleading sales conduct, segregation rules which require the separation of customer funds from the funds of the firm and rules which require that customers' orders get priority over firm orders.

Exchanges and firms that want to attract customers clearly have incentives to ensure customers that they will be treated fairly. Those with good reputations are more likely to be successful than those with reputations for mistreating customers. But customers may not always know a firm's reputation and firms sometimes have difficulties in monitoring their own employees. Additionally, the ability of a firm or a self-regulatory organization (SRO) to discipline those who commit fraud is limited. Even in jurisdictions with a vigorous self-regulatory program, the existence of a governmental regulator as overseer of that program ensures greater accountability.

LEGISLATION

A nation which intends to have derivatives markets will normally require legislation which addresses several issues. The law should make it clear that derivatives which are in compliance with established regulations are legal instruments. This, in turn, requires legislation which gives a governmental agency the necessary regulatory powers. These include the power to establish regulations, the power to monitor compliance with regulations and the power to enforce regulations. The governmental agency's power over SROs should also be delineated in legislation.

In addition to giving the regulatory agency the power necessary to perform its duties as the derivatives industry is getting started, the authorizing legislation should give the agency the ability to adapt to a changing environment. As an industry grows, as technology changes, as customer needs change the appropriate type and scope of

regulation is almost certain to change also. Thus, regulatory flexibility is critical to the long-run success of both regulation and the industry it regulates.

REGULATORY STRUCTURE

The need for a governmental agency with the authority to regulate derivatives exchanges is almost universally accepted, and all countries with derivatives exchanges have such agencies. The question of regulatory structure, however, also involves questions of the relationship between the governmental agency or agencies and SROs. It also involves the question of whether one agency should regulate all derivatives exchanges in a country and whether it should be the same agency that regulates securities markets. There are certainly no universally accepted answers to these questions. Indeed, virtually every country has adopted its own particular approach to the issue of regulatory structure. This is, to a certain extent, desirable, because each country has its own unique culture and legal system and its own particular needs and problems. It must also be recognized that there are advantages and disadvantages to any regulatory arrangement.

An agency can be too large to be efficient or sufficiently flexible. Or it can be too small to be efficient. Furthermore, the existence of more than one agency can lead to inconsistent or duplicative regulation and uncertainty concerning regulatory jurisdiction. On balance, it may be desirable for nations with emerging derivatives markets to consolidate regulation in one governmental agency. Certainly, if a country already has an agency which is capable of taking on the task of regulating derivatives, it would seem appropriate to give it that responsibility rather than creating a new agency. That is, the advantages of having all governmental regulatory authority over derivatives and securities exchanges in the existing agency appear to outweigh the costs of this arrangement. On the other hand, if regulatory responsibilities are already handled by more than one agency and the arrangement is working well, there may be good reason not to consolidate the agencies.

Self-Regulation

The question of the appropriate division of regulatory responsibilities between the governmental agency and SROs is easier to answer in principle than in practice. There can be substantial benefits from self-regulation. SROs have the ability to impose ethical standards which go beyond those imposed by government. They have incentives to use the most efficient methods of regulation. They have the business sensitivity to know when a regulation will be workable and beneficial to market users. They are able to identify and comprehend problems at an early stage and to respond with appropriate solutions. SROs should undertake those regulatory responsibilities which they can perform most efficiently and which they have incentives to perform efficiently. The ability of an SRO to perform well, however, depends on many factors, including the qualifications and experience of its personnel. It is likely that, as the domestic industry grows and matures, it will be desirable to have SROs play a larger regulatory role. Thus, the regulatory structure should be flexible enough to accommodate such a development.

A recent report by the Council of Securities Regulators of the Americas provides an excellent discussion of the issue of self-regulation.³ The discussion below borrows heavily and contains direct quotes from this report.

“The governmental authority should consider creating a regulatory system where market operators or market intermediaries exercise direct oversight responsibility over their respective areas of competence, subject to appropriate government supervision, and to the extent appropriate to the size and complexity of the markets.”

As markets expand, government authorities should consider allowing market operators or market intermediaries to exercise oversight responsibility, i.e., a system of self-regulation under the oversight of a government authority. In this manner, government authorities can more efficiently use limited resources and create a network of shared responsibility throughout the industry.

There are a number of advantages to shared responsibility between market intermediaries, market operators, and the government authority. First, when market intermediaries participate in promoting markets through self-regulation, they are more likely to comply with the rules that are imposed. Second, market intermediaries offer considerable depth and expertise regarding market operations and practices, and may be able to respond more quickly and flexibly than the government authority to changing market conditions. Third market intermediaries and market operators should be highly motivated to develop cost-effective, workable regulations. Fourth, market intermediaries and market operators can establish high standards of business practice and ethics that surpass legal standards. With industry cooperation and assistance, the government authority can achieve its goals of protecting investors from fraud and manipulation. This structure also may have the benefit of encouraging innovation.

The concept of self-regulation, however, does not imply that the government authority can or should abdicate responsibility for oversight of the self-regulatory system. Indeed, all those involved in the self-regulatory system should ensure that conflicts of interest between SROs, their members and the public, as well as other potentially anti-competitive behavior, be avoided and, where they arise, be affirmatively addressed.

A system of shared oversight responsibility can be pictured as a pyramid. The bottom tier is comprised of market intermediaries, which are members of the SRO and must meet established standards to join the organization. The second tier consists of SROs, which include exchanges and other market operators. At the top of the pyramid, oversight authority converges in the government authority, which is responsible for the entire oversight system. In such a system, the first level of oversight is conducted by the market intermediaries. These entities are responsible for training and educating their employees about applicable laws, regulations, and SRO rules, and for supervising their activities. At the next level, SROs should be given the legal obligation to oversee daily

³ “Principles of Effective Market Oversight”, Council of Securities Regulators of the Americas, May 1995.

trading activity, and oversee and enforce standards of conduct and financial integrity. In enforcing standards of conduct by market intermediaries, SROs may find it useful to establish a membership structure. This allows the SRO to protect the integrity of the organization by adopting standards that regulate member conduct, while at the same time permitting fair and open access to the organization. The SROs also should be legally obligated to cooperate with and assist the government authority in investigating and enforcing applicable laws and regulations. The government authority has ultimate responsibility for the fair and effective operation of this oversight system. Consequently, if the market operator is granted oversight responsibility and authority, the market operator should be responsible for the oversight and regulation of the market intermediaries within its jurisdiction. The intermediary, in turn, should be required to comply with the rules and mechanisms a market operator imposes.

The market intermediary should be held accountable for the actions of its individual employees. Imposing these responsibilities creates an incentive for market operators and intermediaries to provide adequate training and supervision of their work force. The widespread distribution of responsibility for market integrity among market intermediaries and operators increases the opportunities to detect and deter fraudulent and illegal conduct.

“The government authority should require a SRO to meet appropriate standards before allowing the organization to exercise its authority. Moreover, once the SRO is operating, the government authority should assure itself that the exercise of this power results in fair and consistent enforcement of applicable securities and futures laws, regulations and appropriate SRO rules.”

As a condition to authorization, the government authority might consider requiring the SRO to:

- promote the public interest;
- have the capacity to carry out the purposes of governing laws, regulations, and SRO rules, and to enforce compliance by its members and persons associated with those laws, regulations, and rules;
- treat all members of the SRO or applicants for membership in a fair and consistent manner;
- develop rules that are designed to prevent fraudulent and manipulative practices and to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in financial instruments;
- submit to the government authority its rules for review and / or approval as the authority deems appropriate, and ensure that the rules of the SRO are consistent with the public policy directives established by the government authority;
- cooperate with the government authority and other SROs to investigate and enforce applicable laws and regulations;
- enforce its own rules and impose appropriate sanctions for non-compliance;

- assure a fair representation of members in selection of its directors and administration of its affairs;
- avoid rules that may impose any unnecessary burden on competitors; and
- avoid using the oversight role to allow any market participant unfairly to gain advantage in the market.

“The government authority and / or SRO should develop enforceable standards including standards of business conduct for market intermediaries, based on high standards of commercial honor, and just and equitable principles of trade, and standards of financial integrity.”

Regulatory Authority

Regardless of the extent to which self-regulation is used, the governmental agency should have authority to (1) establish rules, (2) monitor compliance with the rules and (3) enforce the rules. This may take the form of direct responsibility by the agency or of requiring SROs to perform these functions. In the latter case the agency should have compliance and enforcement authority over SROs.

REGULATORY ISSUES

The three broad goals of regulation have been discussed above. This section takes a closer look at the issues which should be addressed in order to reach these goals.

Market Efficiency and Integrity

1. *Product Design.* Any product must be designed in a way which meets the needs of customers if it is to be successful. A derivatives contract is no exception, and many derivatives contracts in many markets have failed because they have not passed this test. This by itself is not a matter of regulatory concern, but regulators are concerned about whether a contract is subject to manipulation and whether it is likely to have an adverse impact on the underlying cash market. Thus, regulators are concerned about such items as the relationship of the contract to the underlying market, whether futures and cash prices will converge as the contract expires, and the procedures for delivery or cash settlement.

Some regulators and market participants have been especially concerned about the design of stock index futures and options and the impact of these derivatives on the underlying market. As a result of this concern, the IOSCO Technical Committee has produced a useful report on the design of stock index futures. This report deals with the following aspects of the design of these products: method of calculation, number of component stocks, liquidity of component stocks, dispersion of component stocks within or across business sectors, replacement of component stocks, selection of component stocks, and clearance and settlement.

2. *Order Execution.* Market integrity depends in part upon fair and efficient execution of orders. This in turn means that rules governing order priority, the responsibilities of market makers (if any), transparency and off-exchange transactions (if permitted) must be clearly defined and applied consistently. All market participants should be able to know exactly what these rules are.

3. *Surveillance.* One of the most important ways of protecting market integrity is market surveillance - monitoring the market on a regular basis for any potentially manipulative behavior, such as the accumulation of unusually large positions, especially near the expiration of a contract. There is nothing inherently wrong with large positions, but they provide a warning signal for further investigation or closer surveillance and monitoring. Requiring market participants to report large positions is one way of facilitating surveillance.

4. *Operational Capacity.* An exchange cannot guarantee that a market will be liquid, but it should be able to guarantee that it will have the capacity to handle any expected order flow. Thus, it should be able to process orders and record transactions rapidly. It should have adequate capacity on the trading floor or in the electronic trading system.

Financial Safety and Integrity

1. *Capital Standards.* Each financial intermediary should have sufficient capital to preserve the safety and soundness of the financial system. Firms that hold funds which belong to others should have adequate capital to ensure that they can meet their obligations at all times, including periods of high market volatility. In derivatives markets, this means that clearing members and the firms that accept funds from customers must always meet certain capital standards. These standards should reflect both the amount of funds belonging to others which are held by the firm and the risk inherent in the different types of assets owned by the firm. Provisions should also be made to ensure that firms which do not meet or are in danger of not meeting their capital requirements notify the appropriate persons when this happens.

2. *Clearing Facility.* Clearing houses essentially perform two functions: trade clearing (the process of collecting trade information, matching trades, and interposing the clearing house as a counterparty to each trade) and trade settlement (the process whereby final payments are collected and distributed). The establishment of a clearing facility (which may be part of an exchange or an independent entity) is essential to the success of an exchange derivatives market. The benefits of a clearing house include the reduction of counterparty credit risk (through the exchange guarantee) and the efficient processing of trade information, including the process of marking to market all positions on a daily basis.

3. *Margins.* Margins underlie the safety provided by the clearing house. Their purpose is to reduce or eliminate the risk of default by customers, by those who handle customer orders and by clearing members. Typically, daily variation margin is

established at a level which covers at least one day's possible loss and is generally based upon an assessment of historical and projected price volatility. The setting of margins entails balancing the benefits of preventing default and the cost of the funds used to make the margin payments. If margins are too low, the risk of default is too high. If margins are too high, the cost of entering into derivatives contracts will be unnecessarily high. As a result, there will be less use of derivatives, markets will be less liquid and risk management will be more difficult for some firms and individuals.

The setting of margin levels, involving analysis of historical price moves and assessments of future price volatility, has been generally viewed as a function that is best performed by exchanges. Regulators do have a role to play, however, by exercising oversight and reviewing exchange rules related to the establishment of a margin system. They may also maintain emergency authority to intervene under certain defined "emergency" conditions.

4. Protection of Customer Funds. Derivatives brokers will generally hold funds belonging to their customers as a result of margin payments and customers' gains from their derivatives contracts. In order for customers to be willing to provide these funds to their brokers they must be confident that the funds will be properly handled. One method of accomplishing this is to require that these funds be held in separate or segregated accounts. In any event, the way in which their funds will be treated as well as the existence or non-existence of any guarantee fund or insurance should be made clear to customers. Appropriate recordkeeping rules are also vital.

5. Default, Insolvency or Bankruptcy Provisions. Many of the items discussed above are designed to minimize the probability and effects of a default, but this risk cannot be entirely eliminated. Thus, it is necessary to have rules to minimize or contain the effects of such an event. Rules establishing procedures for the transfer of positions and funds from a defaulting firm should be made clear to market participants. It is also essential that there be rules establishing the priority of customer claims in the case of bankruptcy or default and that these rules are known to all in advance of any possible default.

6. Market Disruptions. Margin requirements and regular (at least daily) valuation of contracts (marking to market) are designed to protect the financial integrity of the system against price volatility. But special measures such as price limits or circuit breakers may be considered desirable in times of market disruption or abnormal volatility. Well-established channels of communication among exchanges (including cash market exchanges) and among exchanges, clearing houses and regulators can be critical in times of market disruption. The Technical Committee of IOSCO has produced a very useful document concerning open and timely communication in periods of market disruption. This issue is addressed more fully in the section below on Regulatory Coordination and Cooperation.

7. Financial Recordkeeping. Rules governing the creation, maintenance and retention of financial records are clearly an essential element in the maintenance of

financial integrity. While each country may have its own rules and accounting systems, international cooperation and surveillance would be enhanced by the use of accounting methods which are internationally recognized.

Customer Protection and Fairness

1. *Authorization / Registration / Licensing.* One method of increasing the probability that customers will be treated fairly is to ensure that all those who deal with customers meet certain standards concerning their knowledge of the industry. This knowledge can be demonstrated by such methods as completing the appropriate course of instruction or passing qualification examinations. A complement to this is to prohibit those who have a history of fraudulent treatment of customers or other illegal behavior from continuing to deal with customers. These standards can be imposed by various forms of licensing or registration of firms and their employees.

2. *Order Execution.* Rules which establish the priorities by which orders are executed are essential to provide fair execution for customers and to prevent fraud. Items to be considered in this regard are order size, type of customer, and whether some participants can act in a dual capacity. The rules for order execution are typically designed to ensure competitive execution of orders. If orders are executed electronically, care must be taken to ensure that the algorithm for such execution conforms to these rules. The role of market makers must be addressed in these rules as must the treatment of off exchange transactions, if they are permitted.

3. *Recordkeeping.* In order to determine whether the order execution rules have been followed, records of all transactions should be kept. An audit trail for each transaction from the time an order is placed until it is executed will permit resolution of issues concerning whether a customer has been treated fairly and can serve as evidence in proceedings on this issue. Rules concerning how long records should be retained are also needed.

4. *Sales Representation and Disclosure.* Those who use derivatives should realize the risks inherent in some transactions. Rules to ensure that potential customers are advised of these risks and to prevent unrealistic sales representations are important aspects of customer protection.

5. *Product Design.* Product design is an important aspect of both market integrity and customer protection. With respect to the latter, questions such as the procedures for delivery and for establishing settlement prices must be addressed.

6. *Dispute Resolution Programs.* Programs which provide fair and expeditious resolution of disputes over how a customer has been treated should be established. Such programs may take various forms, such as mediation, arbitration, or judicial proceedings.

Compliance and Enforcement

1. *Compliance.* The adoption and implementation of rules are of little use unless firms and markets comply with these requirements. This means that there must be an effective program to secure compliance with the rules established by the regulatory agency and the SROs. This program includes regular monitoring of all parties, both regular and unannounced audits of parties' financial, trading and other records, and adequate surveillance of market activity. Accordingly, the agency and SROs must establish procedures for detecting instances of non-compliance with the rules they have established.

2. *Enforcement.* A vigilant enforcement program (both regulatory and self-regulatory) against those who attempt to manipulate the market or engage in other rule violations is an essential component of a sound regulatory system and is critical to ensuring market integrity, financial integrity and customer protection. Regulatory authorities should have the necessary authority to detect, investigate, prosecute and sanction the law and regulatory requirements. If appropriate penalties for violations of the rules are lacking, the rules will have little impact.

INSTITUTIONAL DIFFERENCES

Existing derivatives exchanges, SROs and governmental regulatory agencies all have rules intended to achieve the three basic regulatory goals. There are many similarities in the rules of different exchanges, regulatory organizations and agencies across different jurisdictions, but there are also many differences. These differences reflect, in part, differences in the way the markets are organized and operated. One such difference, for example, concerns the relationship between the exchange for equity derivatives and the equity exchange. In some instances, the two exchanges are part of the same organization. In others, the equity derivatives exchange and the equity exchange are entirely separate entities.. Another difference concerns the structure of the clearing house. In some cases, the clearing house is part of the exchange. In others, it is not. And some clearing houses clear for only one exchange while some provide clearing services for more than one exchange. Another fundamental institutional difference lies in the trading method itself. Most derivatives exchanges use open-outcry, but some use electronic trading systems.

These differences appear to be so fundamental that there is a natural inclination to believe that a successful market or successful regulation of a market can only be achieved if the proper choice is made in each of these areas. In other words, the differences in organization and trading method appear to be so profound that some believe that a market or its regulators can only be successful if the *best* organization and trading method is used. Let us look at each of these issues more carefully.

Exchange Structure

This issue is of particular interest with respect to equity derivatives. There is widespread concern that the existence of a derivatives markets for which equities are the underlying product can lead to increased volatility in the equities market and that this

volatility can be function of whether the derivatives exchange is a part of the equities exchange.

In this regard , it should be remembered that the fundamental reason for the existence of a derivatives market is price volatility in the underlying market. In a well-functioning derivatives market, price volatility will be the result of changes in the demand for, or supply of, the underlying product. If both markets are working properly, prices in the two markets will move together and the futures and cash prices will converge as the futures contract expires. Large changes in supply or demand conditions, therefore, *should* cause volatility in both markets - regardless of whether the derivatives exchange is part of the exchange on which the underlying instrument is traded. A poorly designed derivatives contract can cause volatility to be higher than it would otherwise be - regardless of structural considerations. The key, therefore, to preventing derivatives from increasing volatility lies primarily in ensuring proper contract design and in having adequate protections against manipulation rather than in separating - or combining - the derivatives and cash markets.

Clearing House Structure

There are two issues here. One is whether the clearing house should be a part of the exchange or a separate entity. This distinction itself is not very important. The critical issue is that the clearing house have the authority and commitment to impose and enforce prudential margining and collection standards for all market participants. Experience has shown that both types of structure can function very well. Moreover, it has not revealed that one type is more likely to function better than another.

The other structural issue concerns whether a separate clearing house for each exchange (regardless of whether the clearing house is part of the exchange) or a common clearing house for the derivatives and equity exchanges is more likely to be efficient and to promote financial integrity. There are advantages to both arrangements. A common clearing house reduces costs to its members, makes more information about financial risk readily available, and makes it easier for regulators to monitor the entire portfolio of a member. A possible advantage of separate clearing houses (or disadvantage of common clearing) is that the consequences of inadequate margining or other mistakes would have more widespread consequences. There may also be operational disadvantages to common clearing. Margining arrangements for equity and derivatives markets are different as are requirements for marking to market. There is no generally accepted view as to which arrangement is better at ensuring financial integrity, but there would seem to be little reason for regulators to require common clearing, although they certainly might permit it. The more critical issue is whether the appropriate rules for establishing financial integrity are in place and the proper procedures for monitoring and enforcing compliance with these rules are regularly carried out.

Trading Method

Most existing derivatives exchanges use the open outcry method in which a trade is executed only when the parties to the trade personally agree to its terms. A few use electronic or screen-based systems in which trades are executed by a computer based upon orders entered by the parties. This difference in trading methods raises the question of whether one system is superior with respect to achieving market and financial integrity and to providing fair treatment of customers. From a regulatory perspective, however, the difference between the two types of trading systems may not be as great as some believe.

All modern exchanges, whether screen-based or open outcry, rely on electronics to a large and growing extent. An open outcry system can use electronic technology for such purposes as transmitting orders, recording trades, constructing audit trails, and monitoring compliance. This means that today's open outcry exchanges are able to construct and maintain much more accurate records than was the case previously. As a result, both SROs and governmental regulators can be more effective in monitoring trading activity and in detecting and deterring rule violations.

The question of the type of trading system to use is fundamentally a business or economic issue rather than a regulatory issue.⁴ Both open outcry and electronic systems can achieve acceptable levels of integrity and fairness. Neither type of system is foolproof. No matter what type of trading method is used, problems can and will occur on occasion. Some people will violate the rules. Unforeseen circumstances will arise. When this happens SROs and other regulators must be prepared to discipline those who violate the rules and to modify systems and rules if necessary.

From a regulatory perspective, the most important issue is not the type of trading system. It is to ensure that the exchange has rules which are appropriate for the trading technology used and systems for monitoring and enforcing compliance with the rules. In today's world these systems will necessarily rely heavily upon electronic technology even though the trading system itself may well rely upon open outcry.

REGULATORY COOPERATION AND COORDINATION

Financial markets, including those for derivatives, are international. Disruptions or instances of high volatility in one market are likely to have effects in markets around the world. It is essential, therefore, that both SROs and governmental regulatory agencies develop procedures for dealing with problems with international dimensions. This means, in part, establishing and maintaining mechanisms for cooperation and coordination with regulators and SROs in other jurisdictions. Several recent documents address this issue. They are listed in the References at the end of the report.

One of these documents is the "Windsor Declaration". It is the result of a meeting of representatives of the governmental agencies responsible for supervising futures and options markets in 16 countries in May 1995. At this meeting the supervisory authorities discussed specific cooperative measures to strengthen regulatory supervision, minimize

⁴ This issue is discussed in The Report of the Task Force on Derivatives.

systemic risk and enhance customer protection with a view to containing or preventing the adverse effects of financial disruptions. In particular they addressed issues related to cooperation between market authorities, protection of customer positions, funds and assets, default procedures, and regulatory cooperation in emergencies. As the Declaration points out “increasingly, members of one market or companies associated with such members, trade for themselves or customers in multiple jurisdictions. Mechanisms should be in place to ensure that enhanced cooperation and communication occurs as necessary between regulators and/or market authorities to minimize the adverse consequences of market disruptions caused by defaults or other failures.” Thus, regulators of emerging derivatives markets need to ensure that such mechanisms are in place for their markets.

REALISTIC REGULATORY GOALS

Prices in derivatives markets are often quite volatile. This has led some authorities to be reluctant to permit the establishment of such markets - in part because they fear that this volatility will cause increased price volatility in the underlying (cash) market. But derivatives markets exist only for products and instruments that are likely to have significant price volatility. Derivatives markets are useful because they help people manage the risk associated with this volatility. A regulatory scheme which imposes unnecessary costs on derivatives markets will reduce or bar the use of derivatives. The effect of this will be to make some business enterprises more risky than they need to be.

Regulators must remember that the purpose of regulation is not to prevent price volatility. It is ensure that prices in derivatives markets reflect supply and demand. The purpose of regulation is not to ensure that no one goes bankrupt. It is to contain and minimize the systemic effects of such an event. The purpose of regulation is not to ensure that investors do not lose their funds. It is to ensure that appropriate safeguards against customers’ losing their money due to fraud are in place.

Those responsible for monitoring the performance of derivatives regulators should not expect the impossible of the regulators. They should not expect regulators to ensure that prices are not volatile. Nor should they expect regulators to protect market participants from the all the possible consequences of volatility or the consequences of their own decisions. If the financial authorities want the benefits associated with having derivatives exchanges, they must realize that there will be times when some are dissatisfied with the performance of these markets. They should hold their regulators accountable for having cost effective means of achieving market integrity, financial integrity, and customer protection in place, but not for being unable to control the forces of supply and demand and not for being unable to prevent market participants from making unwise decisions.

CONCLUSION

There are many ways of dealing with each of the regulatory concerns discussed above. This is reflected in the six reports prepared as part of this project. It is also clearly revealed in a document compiled by the US Commodity Futures Trading Commission (CFTC) entitled “International Regulation of Derivatives Markets: Common Framework Analysis and Cross Regulatory Summary “ (1995 edition). This document summarizes the regulatory regimes for derivatives in 17 jurisdictions. It shows that some countries address most of these items with detailed government regulations. Others rely more on self-regulation or government oversight with relatively few specific rules.

Many approaches seem to work well, and an IOSCO report (such as this one) should not recommend any one approach - *except to emphasize the importance of making the rules clear to all market participants and to apply them uniformly*. The appropriate system for any country depends upon a variety of factors, many of which are specific to that country. These factors include the sophistication of the customers who are using the market, the strength of the nation’s financial infrastructure, the degree of international participation in the market, and the legal, social, and cultural environment.

Those entrusted with regulating futures markets have a difficult responsibility. There is no magic or unique road to successful regulation. In large measure the regulators’ task is to see that each of the items mentioned above is addressed effectively - either through direct regulation or self-regulation. If regulators can accomplish this, they are well on the way to achieving the three basic goals of market integrity, financial integrity and fair treatment of customers.

CHECKLIST

Market Efficiency and Integrity

1. Product design
 - a. relationship to cash market
 - b. protections against manipulation
 - c. delivery / cash settlement

2. Order execution
 - a. priority
 - b. market makers
 - c. off-exchange transactions
 - d. transparency

3. Surveillance
 - a. large position reporting
 - b. monitor expiration of contract

4. Operational capacity

5. Compliance

6. Enforcement

Financial Safety and Integrity

1. Capital standards
 - a. exchanges
 - b. clearing organizations
 - c. clearing members
 - d. financial intermediaries
 - e. notification of inability or possible inability to meet requirements
2. Relationship between exchange and clearing facility
3. Margins
 - a. criteria for setting
 - b. frequency of settlement
 - c. what can be used as margin?
4. Protection of customer funds
 - a. segregation
 - b. records
 - c. where can they be held?
 - d. insurance or guarantee fund
5. Default, insolvency or bankruptcy provisions
 - a. treatment of customer funds
 - b. transfer of positions
6. Market disruptions
 - a. price limits
 - b. circuit breakers
 - c. special procedures during market disruptions
 - d. emergency powers
7. Financial recordkeeping
8. Compliance
 - a. surveillance
 - b. audits
9. Enforcement

Customer Protection and Fairness

1. Authorization / registration / licensing
 - a. exchanges
 - b. firms
 - c. individuals

2. Order execution
 - a. competitive
 - b. priority
 - c. algorithm for electronic trading
 - d. antifraud rules

3. Recordkeeping
 - a. all transactions
 - b. audit trail
 - c. retention

4. Sales representation and disclosure
 - a. risk disclosure statement
 - b. promotional material

5. Product design

6. Dispute resolution programs

7. Compliance
 - a. exchanges
 - b. SROs

8. Enforcement
 - a. exchanges
 - b. SROs
 - c. regulatory agency

REFERENCES

IOSCO REPORTS

“Contract Design of Derivative Products on Stock Indices”, October 1992

“International Conduct of Business Principles”, July 1990

“Measures to Minimize Market Disruption”, October 1992

“Mechanisms to Enhance Open and Timely Communication Between Market Authorities of Related Cash and Derivative Markets During Periods of Market Disruption”, October 1993

“Report of the Emerging Markets Committee Task Force on Derivatives”, October 1994

OTHER REPORTS

“Emerging Futures and Options Markets”, International Finance Corporation, May 1994

“Financial Integrity Recommendations”, Futures Industry Association, Global Task Force on Financial Integrity, June 1995

“International Regulation of Derivatives Markets: Common Framework Analysis and Cross Regulatory Summary “, US Commodity Futures Trading Commission, 1995

“Principles of Effective Market Oversight”, Council of Securities Regulators of the Americas, May 1995

“Windsor Declaration”, Supervisory Authorities for Futures and Options Markets in Sixteen Countries, May 1995