GLOBAL Clearing AND Settlement

A Plan of Action

GROUP OF THIRTY
All members of the Steering Committee served in their personal capacities. The views expressed in this report do not necessarily reflect the views or policies of their respective institutions, nor does publication of the report by the Group of Thirty imply an endorsement of the views expressed herein.

Full copies of this report are available for $60 from:

Group of Thirty
1990 M Street, N.W., Suite 450
Washington, DC 20036
Tel: (202) 331-2472 · Fax: (202) 785-9423
WWW – http://www.group30.org  E-mail – info@group30.org
EXECUTIVE SUMMARY

Clearing and settlement of securities is a core financial function on which fundamental confidence in the financial markets depends. It is also an area experiencing rapid growth, profound technical and structural change, and infrequent but severe market shocks. Growth has been tremendous. For example, the value of shares traded annually in world markets rose nearly 63 times between 1980 and 2001. Over that same period, U.S. gross activity (both purchases and sales) in foreign securities grew nearly a hundred-fold, while foreign gross activity in U.S. securities also increased more than a hundred-fold. In Europe the institutional setting within which clearing and settlement occurs is changing rapidly, while technology is changing the face of the process worldwide. And the events of September 11, 2001, chillingly demonstrated that global clearing and settlement arrangements are vulnerable to physical disruption and threats previously considered improbable.

Any one of these factors—rapid growth, structural change, or market shocks—would normally be grounds for a thorough reexamination of market function and each has, on occasion, provided justification for significant changes in market practices and supervision. Mindful of the need for reform, the Group of Thirty commissioned this study fully a year before terror struck Wall Street. Subsequent developments have only underscored the importance of the project.

The report recommends wide-ranging reform of the clearing and settlement process, including creation and implementation of global standards in technological and operational areas, improvements in risk management practices, further harmonization of global legal and regulatory environments, and improved governance for providers of clearing and settlement services. These changes are embodied in the following 20 recommendations, which, when implemented, will significantly improve the safety and efficiency of international securities markets. The reforms envisaged are likely to be attainable within five to seven years at modest incremental cost.

THE TWENTY RECOMMENDATIONS

Creating a Strengthened, Interoperable Global Network

1. Eliminate paper and automate communication, data capture, and enrichment.
2. Harmonize messaging standards and communication protocols.
3. Develop and implement reference data standards.
4. Synchronize timing between different clearing and settlement systems and associated payment and foreign-exchange systems.
5. Automate and standardize institutional trade matching.
6. Expand the use of central counterparties.
7. Permit securities lending and borrowing to expedite settlement.
8. Automate and standardize asset servicing processes, including corporate actions, tax relief arrangements, and restrictions on foreign ownership.

2. See footnote of Figure 1-1. p. 17.
Global Clearing and Settlement: A Plan of Action

MITIGATING RISK
9. Ensure the financial integrity of providers of clearing and settlement services.
10. Reinforce the risk management practices of users of clearing and settlement service providers.
11. Ensure final, simultaneous transfer and availability of assets.
12. Ensure effective business continuity and disaster recovery planning.
13. Address the possibility of failure of a systemically important institution.
15. Advance legal certainty over rights to securities, cash, or collateral.
16. Recognize and support improved valuation and closeout netting arrangements.

IMPROVING GOVERNANCE
17. Ensure appointment of appropriately experienced and senior board members.
18. Promote fair access to securities clearing and settlement networks.
19. Ensure equitable and effective attention to stakeholder interests.
20. Encourage consistent regulation and oversight of securities clearing and settlement service providers.

These recommendations are further elaborated at the end of this summary and in the first five chapters of the accompanying report. Chapter 6 provides a fuller discussion of priorities and a plan of action. Appendix 1 presents detailed steps toward implementation. This is an ambitious agenda that will require substantial action by a wide range of market participants, industry associations, and public sector agencies, and it is important to understand why changes of such significance must be made at this time.

RISING STAKES AND RISKS IN THE CLEARING AND SETTLEMENT PROCESS
Clearing and settlement of securities—the process by which the ownership of securities is transferred finally and irrevocably from one investor to another, typically in exchange for a corresponding transfer of funds—is central to all securities market activity and is thus a linchpin of any financial system. Yet few people, even within financial institutions, understand its complex mechanics in detail. The process, including the associated costs and risks, is also largely invisible to end investors. For the most part this is remarkable, in the same way that users of telephone or Internet services need not understand the intricacies of data transmission or digital switching technology.

The reliable performance this implies owes much to the high level of attention that has been devoted to domestic systems, notably in response to the Group of Thirty’s 1989 report, “Clearance and Settlement Systems in the World’s Securities Markets.” Recommendations published in 2001 by the Committee on Payments and Settlement Systems of the Group of Ten central banks (CPSS) and the International Organization of Securities Commissions (IOSCO) are now one of the key standards used by public authorities to achieve sound financial systems.

At the same time, this is a period of rapid change in technology and market infrastructure, linked to fundamental changes in the marketplace. These changes are associated with growth in trading volumes and technological advances that have been instrumental in opening up access to markets and providing opportunities to automate markets’ core processes. Continued consolidation of market players and infrastructure is concentrating both market power and risk. Investors and the financial intermediaries that serve them are increasingly focusing on the costs of trading, and the cleaning and settlement of those trades. With securities trading, especially cross-border trading, expanding rapidly, both the stakes and the risks involved are rising.

THE CHALLENGE OF CROSS-BORDER CLEARING AND SETTLEMENT
Cross-border trading is a particular challenge because, at its heart, clearing and settlement of securities is still an activity that takes place market by market. This “domestic” approach reflects the natural evolution of securities markets in the context of local law, business
practice, and regulatory frameworks, and the fact that settlement systems have usually grown up in close alliance with the markets they support. Indeed in several countries, the stock exchange owns the clearing and settlement system. In some countries, members of the exchange are obliged to use these systems.

Any firm that provides investment services to international investors must participate in myriad settlement systems and related legal and regulatory systems. Maintaining the systems and retaining people who understand the intricacies of the conventions and practices that differ from system to system and from market to market is costly. That cost is ultimately borne by investors in internationally traded securities, be they individuals or institutions, mutual funds or pension funds.

**NETWORK IMPLICATIONS**

As well as adding costs, cross-border trading introduces an increasing element of risk. The lack of implementation of globally recognized technical standards, uniform business processes, and consistent legal and regulatory underpinnings makes the global clearing and settlement network inefficient, unwieldy, and potentially unreliable. Furthermore, this global network links clearing and settlement systems with payments systems and foreign-exchange markets, so that problems in one system and market are increasingly likely to affect markets and firms in other parts of the world.

In addition, this imperfect network is vulnerable to shocks, whether through an unexpected surge in market volatility, a major technical or institutional failure, or a physical disruption. These shocks tend to be of relatively short duration but are sometimes very large in scale. Loss of the clearing and settlement functions even briefly can be costly and disruptive of markets. Loss of function over several days, or simply at a critical time in the daily clearing and settlement process, can have serious systemic implications, especially if accompanied by other financial disruptions.

**MARKET DYNAMICS AND THE NEED FOR CHANGE**

With risks rising and pressures to reduce costs increasing, it would be reasonable to expect markets to respond to these challenges in ways that reduced both costs and risk. This report proceeds from the premise that market-led change is essential. However, there are two reasons to believe that some external stimulus is needed.

First, the legal and regulatory frameworks on which clearing and settlement systems are founded continue to develop piecemeal and largely on a domestic basis. Thus, the complexities of cross-border clearing and settlement are likely to grow, even if best industry practice and official guidance are strictly followed. Second, incentives within individual clearing and settlement entities tend to support incremental change that strengthens the local franchise, rather than initiatives to facilitate greater competitiveness at the international level that could adversely affect the value of the local franchise. Indeed, segmentation restricts competition because each system is able to set its own standards for membership and for the services it provides. These are not incentives likely to produce global standards of best practice appropriate to the emerging global network.

**THE GROUP OF THIRTY INITIATIVE**

For all these reasons, the Group of Thirty decided to initiate an assessment of cross-border clearing and settlement issues. A Steering Committee was recruited from senior representatives of the private sector and leading figures in the public sector (see page ix). The contribution of the latter, owing to the demands of public office, was in a personal capacity, drawing on their experience but without committing their institutions. The aim of the assessment was to improve efficiency and reduce risk in the system. Its primary focus was major securities markets and the key institutions that form the backbone of the global clearing and settlement framework. In the interest of promoting meaningful change, its objective was to enunciate technical, legal, and process standards where possible, rather than remaining at the level of

Implementing the twenty recommendations in this report would significantly improve the safety and efficiency of international securities markets.
broad principles. To reflect the realities of the marketplace, Pricewaterhouse Coopers undertook a survey of 40 firms along what this report refers to as the clearing and settlement value chain. Participants ranged from asset managers and broker-dealers to custodians and providers of clearing and settlement services, from small firms to the large “bulge bracket” market participants. It included major trade associations and all major regions of the world (for a complete list of participants, see Appendix 2). To avoid bias in the result, the survey consisted of open-ended questions designed to allow the survey participants to provide their concerns about the current system and expectations regarding this study.

The survey findings constitute a far-reaching agenda for change, aimed at achieving a truly global model for clearing and settlement. The recommendations contained in this report respond directly to this research. If acted upon, the result would be a widely interoperable and accessible system operating to standards of best market practice.

RELATIONSHIP TO OTHER KEY INITIATIVES
To ensure that any new recommendations were anchored in existing standards of best practice and the latest regulatory guidance, a second element of the assessment was an evaluation of existing principles and standards. These included recommendations of the International Securities Services Association (ISSA), work of the Global Documentation Task Force, various reports on integrating clearing and settlement structures in the European Union including the Giovannini report and work of the European Central Securities Depositories Association, and official guidance issued by various supervisory bodies. Most important in this regard were the recommendations issued jointly by CPSS and IOSCO in November 2001, which this report fully endorses as a foundation for the recommendations that follow. It should be noted, however, that this report moves beyond these recommendations in several respects.

- This report promotes “best practice” that clearing and settlement systems in the most advanced economies should aspire to meet within roughly five to seven years, while the CPSS-IOSCO recommendations set forth minimum standards that are expected to be met at the earliest opportunity by settlement systems in all economies.
- Although this report and CPSS-IOSCO share the broad objectives of safety and efficiency, the agenda set out here is considerably more ambitious regarding efficiency, reflecting industry aspirations expressed in the survey.
- This report places greater emphasis than CPSS-IOSCO on cross-border issues, aiming for creation of an integrated global network which goes beyond applying minimum standards in individual jurisdictions.
- Overall, this report’s recommendations tend to be more prescriptive than the CPSS-IOSCO recommendations and focus more explicitly on the implementation path to be followed, again reflecting industry aspirations.

Despite these differences in emphasis and intensity, the two sets of recommendations are broadly complementary and entirely consistent. Together, they promote sound infrastructure for global markets.

COSTS AND BENEFITS
The Steering Committee also carefully considered the benefits and costs of the changes being recommended. The available data clearly support the view that the current system is significantly less efficient than it could be. No one disputes that the cost of settling a trade varies significantly from market to market, and cross-border settlement is substantially more expensive than domestic settlement. Yet, when it comes to quantifying this assertion, analysis and opinion differ. For example, the Center for European Policy Studies estimated European Union cross-border costs to be between two and eight times U.S. domestic costs, although the basis and assumptions underlying these calculations have been challenged by other analysis
that finds much greater differences, notably by the Depository Trust and Clearing Corporation. Meanwhile, recent estimates of the cross-border premium for trading costs as a whole range from 30 percent for a wholesale trade to 150 percent for retail. While the quantum differs, the cost differences and the potential for savings in all cases are substantial.³

Studies to date have focused on the direct costs paid to infrastructure providers for clearing and settlement services. We estimate their operating costs at approximately $2.5 billion annually. A much greater share of overall clearing and settlement costs, however, is attributable to internal expenditure among financial intermediaries, the organizations that facilitate a financial transaction between end-user issuers and investors. These broker-dealers and custodian-agent banks spend on the order of $10 billion a year—and this estimate ignores the cost of working capital tied up in the various systems (for analysis of costs, see chapter 1, pp. 15-16). Cross-border trades also fail far too frequently, and it is estimated that manual intervention to fix these problems can increase trading costs by a factor of nearly four.⁴ Significant savings are possible by eliminating the poor data, manual processes, and weak communications that typically cause such failures. An improved infrastructure for clearing and settlement would reduce the unit cost of international transactions, and expanded competition between service providers resulting from a more open and competitive approach to international clearing and settlement services would exert further downward pressure on these costs. Our analysis suggests that these savings will benefit end investors as well as reduce the effective costs to issuers.

The report’s conclusion is that significant cost savings can be realized by implementing its recommendations, although the full measure of cost savings and risk mitigation envisaged in the report will be achieved only through comprehensive reform and over an extended period. Accurate quantification of anticipated efficiency gains, however, would require a detailed business-case analysis that is beyond the scope of even the significant resources dedicated to this project.

While substantial cost-savings are to be had over time from adopting these recommendations, there are also significant costs to be borne in implementing them. This will not be a short-term undertaking. Agreement on standards, changes in the organization of local markets, and changes to operating systems at many service providers and market participants will all take time to effect. At the same time, software and systems must be updated and replaced periodically, typically on a replacement cycle of five to seven years. The alignment between the time required to develop standards and the software cycle should permit introduction of new standards in the context of otherwise necessary system replacement or upgrade. Thus, the changes envisaged here are likely to be attainable within five to seven years at modest incremental cost. It is also worth repeating that the impetus for the most ambitious changes comes from the industry itself, suggesting that the changes proposed will be viewed as essential improvements rather than unnecessary expenditures.

NEW GROUND COVERED BY THE REPORT

Taking account of the full range of analysis, the Steering Committee concluded that fundamental change is needed. The current system of predominantly local provision of clearing and settlement services, based on local or proprietary standards and business practices, must be transformed into a widely accessible global network that is more fully automated and

---


⁴ Based on audits of transcription processing at major financial institutions in Europe and the United States, conducted by SWIFT between 1996 and 1998.
Global Clearing and Settlement: A Plan of Action

operates to consistently implemented global standards. The report breaks new ground in several important areas, beginning in the cross-border arena where it defines interoperability and the steps necessary to achieve it, including development of specific standards. Next is the area of risk management. The report also raises important issues of legal risk relating to the enforceability of netting and collateral agreements, and it incorporates lessons learned from September 11 into higher standards for business continuity and disaster recovery planning. An important new area addressed is post-settlement asset servicing, including corporate actions, tax relief arrangements, and foreign-ownership restrictions. And in the other areas touched by the report, it is fair to say that the standards have been pushed higher.

The result, when these recommendations are fully implemented, will be a framework for international settlement and clearing that is quite different from the status quo. In some ways it will resemble the framework that exists in global telecommunications. The global telecommunications carriers compete among themselves but have common standards (both technical and market practice) for interface among one another and with local exchanges and for delivery of transmissions to the end user. The Steering Committee believes that an approach of this type—one that establishes global standards to which all participants in the clearing and settlement process adhere—is essential to facilitate competition and indeed to encourage the providers of international clearing and settlement services to compete as robustly as possible.

ACHIEVING REFORM

Reform in these three areas constitutes the Steering Committee’s vision for the future of the clearing and settlement system, a vision that will be realized by the 20 recommendations set out in this report. It is worth noting that although the cross-border focus is an important factor in this report, only about one-third of the recommendations are explicitly directed to the cross-border environment. The remainder apply to practices within markets. The reason is simple. Only when the characteristics of performance are consistent will it be possible to create the cross-system linkages ultimately required to produce a seamless global infrastructure.

Together, the recommendations represent a comprehensive plan of action for the future development of global clearing and settlement. Provided that action on these recommendations is systematic, the landscape for clearing and settlement could be very different and much improved within five to seven years. The full improvement in efficiency and safety described in this report will result, however, only from comprehensive adoption of the recommendations set out here.

The critical requirement for change on this scale is the motivation to complete it. Seeing these recommendations through to full implementation will require individual and collective action by providers and users of clearing and settlement services, as well as by supervisors, central banks, and governments. Even though the matters involved are sometimes highly technical, commitment and consensus will be needed not only among technical specialists, but also at the level of boards of directors. Collective action will involve a range of existing industry organizations already active on these issues, while for some, the appropriate venue for action will have to be decided. Neither the Steering Committee nor the Group of Thirty itself can devise or implement these changes.

Although the agenda is ambitious, it is also sensible: responsive to market aspirations for greater safety and efficiency and focused on practical solutions to current problems. It offers an organizing principle for the substantial body of work that is already under way by industry groups, supervisors, and central banks. As new standards and approaches become available, firms will include them in system and software upgrades. The question is whether these efforts will proceed piecemeal or will embrace an approach based on global standards as outlined in this report.

Such an approach can be pursued if those that have the capacity to carry the work forward have confidence that change will come in a reasonable time.
frame and at reasonable cost compared to the anticipated benefits.

To that end, both the Steering Committee and other participants in the study have supported the monitoring of progress against the reform agenda as motivation for action after the report is published. It has been widely suggested that the Group of Thirty should play a continuing role in this process, in collaboration with appropriate public and private sector entities. Accordingly, the Group has agreed to form a Standing Committee to monitor progress in the period after the report’s release.

THE LONGER TERM

The question of how best to carry the full agenda for change through to completion remains to be answered. In other areas such as telecommunications (International Telecommunication Union), postal services (Universal Postal Union), and air transport (International Air Transport Association), an internationally recognized agency has emerged that oversees the creation and maintenance of standards, as well as their adoption and enforcement. In the clearing and settlement area, many organizations are already involved—ISSA, CPSS/IOSCO, the Committee of European Securities Regulators, central banks, supervisors, and various bodies representative of infrastructure providers—but none with both global reach and comprehensive scope. It will ultimately be for the organizations that collectively comprise the global clearing and settlement industry to decide on a long-term approach.

In the meantime, with the Group’s agreement to play a continuing role following release of this report, the Steering Committee makes the following recommendations. These are offered in the firm belief that if implementation of these recommendations begins immediately, then its vision of a safer, more efficient global clearing and settlement system can be brought to fruition in the proposed five- to seven-year time frame.

The current system must be transformed into a widely accessible global network that is more fully automated and operates to global standards.
RECOMMENDATIONS

CREATING A STRENGTHENED, INTEROPERABLE GLOBAL NETWORK

RECOMMENDATION 1. ELIMINATE PAPER AND AUTOMATE COMMUNICATION, DATA CAPTURE, AND ENRICHMENT.
Infrastructure providers and relevant public authorities should work with issuers and securities industry participants to eliminate the issuance, use, transfer, and retention of paper securities certificates without delay. All market participants should seek to automate elements of the process, such as confirmations and trade allocations, that introduce other forms of paper into the securities processing transaction flow as technology safely allows. All market participants should use electronic communication to transmit information for all instruments and transaction types. They should also identify opportunities to streamline processes by avoiding duplicative recording of data and manual addition of supplementary information at each stage of the value chain.

RECOMMENDATION 2. HARMONIZE MESSAGING STANDARDS AND COMMUNICATION PROTOCOLS.
All market participants should adopt ISO15022 (the data field dictionary and message catalogue for securities information flows) as the global standard for straight-through securities messaging across the entire securities life cycle. Over time, XML (extensible mark-up language) should become the language to describe standardized messages. All market participants should support and use communication networks that adopt open, standardized, IP-based protocols for securities transactions.

RECOMMENDATION 3. DEVELOP AND IMPLEMENT REFERENCE DATA STANDARDS.
Market participants should collectively identify, develop and adopt universal securities, counterparty and relevant generic reference data standards that fully meet the needs of all relevant users. Issuers, exchanges, and other originators and distributors of data should make all relevant information available to the market in compliance with these standards for a fair price and on a timely basis.

RECOMMENDATION 4. SYNCHRONIZE TIMING BETWEEN DIFFERENT CLEARING AND SETTLEMENT SYSTEMS AND ASSOCIATED PAYMENT AND FOREIGN EXCHANGE SYSTEMS.
Providers of clearing and settlement services and linked or otherwise associated payment and foreign-exchange systems should collectively ensure that their design, procedures, operational timetables, and funding and cutoff times are such that the operation of one system does not materially reduce the efficiency or increase the risk of settlement in another. Market participants should work together to develop a comprehensive action plan to increase the efficiency and safety of cross-border securities transactions where the foreign-exchange settlement cycle is not synchronized with the securities settlement cycle.

RECOMMENDATION 5. AUTOMATE AND STANDARDIZE INSTITUTIONAL TRADE MATCHING.
Market participants should collectively develop and use fully compatible and industry-accepted technical and market-practice standards for the automated confirmation and agreement of institutional trade details on the day of the trade.

RECOMMENDATION 6. EXPAND THE USE OF CENTRAL COUNTERPARTIES.
Market participants and relevant public institutions should collaborate to assess the potentially substantial risk reduction and efficiency improvements of using a central counterparty. These benefits are expected to outweigh their costs in most markets. Where this is so, market participants should seek

5. ISO, the International Organization for Standardization, is a confederation of national standards institutes that works in partnership with public and private institutions to develop standards to be used consistently as rules, guidelines, or definitions of characteristics and to ensure that materials, products, processes, and services are fit for their purpose.
6. XML (extensible mark-up language) is the universal language for describing structured documents or data on the Internet.
7. IP (Internet protocol) is a suite of protocols developed for and used by the Internet and by private networks as the open, global standard for electronic communication.
either to use the services of an existing central counterparty or to establish one of their own, whichever has the better risk, cost, and benefit profile.

RECOMMENDATION 7. PERMIT SECURITIES LENDING AND BORROWING TO EXPEDITE SETTLEMENT.
Relevant authorities should permit securities lending and borrowing as a method for expediting the settlement of securities transactions.

RECOMMENDATION 8. AUTOMATE AND STANDARDIZE ASSET SERVICING PROCESSES, INCLUDING CORPORATE ACTIONS, TAX RELIEF ARRANGEMENTS, AND RESTRICTIONS ON FOREIGN OWNERSHIP.
Issuers, providers of clearing and settlement services, and other relevant market participants should advise investors of all details of corporate events that they require in an automated, timely manner and in compliance with accepted industry standards, so that each investor can make a timely decision on the action to be taken with full knowledge of the facts. Market participants and public authorities should work together to minimize the administrative costs to each party involved in tax relief arrangements through standardization and automation of procedures and communication of information and through the use and acceptance of electronic data and documentation. Relevant public authorities, infrastructure providers, and market participants should work together to harmonize and make transparent the processes, documentation, and communication of information in connection with foreign-ownership restrictions and reporting requirements.

MITIGATING RISK
RECOMMENDATION 9. ENSURE THE FINANCIAL INTEGRITY OF PROVIDERS OF CLEARING AND SETTLEMENT SERVICES.
Providers of clearing and settlement services should manage their risks and set standards and controls concerning the use of those services that allow them to conduct business in a safe, sound, and prudent manner consistent with their business model and all relevant supervisory and regulatory requirements. The need to operate prudently within the risk boundaries inherent within the business model requires risk management processes and standards, which should be applied objectively and consistently in determining compliance with risk measures, in three broad areas: the counterparty due diligence process; the procedures and techniques used to measure, monitor, and control risk exposure; and the minimum financial and liquidity requirements. Each organization should publish a report, at least annually, that describes the business model, risk framework, and underlying risk management processes, controls, and standards, together with the results of independent testing of those procedures. The report would thereby reassure users that the organization had operated effectively, and also would provide greater transparency to the market.

RECOMMENDATION 10. REINFORCE THE RISK MANAGEMENT PRACTICES OF USERS OF CLEARING AND SETTLEMENT SERVICE PROVIDERS.
Organizations that use, or are considering using, providers of clearing and settlement services should establish robust due diligence and counterparty risk management controls and processes that appropriately evaluate, measure, monitor, and control the risks inherent in such activity and in associated customer-related business.

RECOMMENDATION 11. ENSURE FINAL, SIMULTANEOUS TRANSFER AND AVAILABILITY OF ASSETS.
Providers of securities settlement services should reduce to the lowest possible level the credit risk created if securities or cash are delivered without receipt of corresponding assets, by linking securities transfers to funds transfers in a way that achieves effective delivery versus payment (DvP) and by making transparent the point at which finality of transfer is achieved. Once finality of transfer is fully assured, the rules should enable a receiver to re-use securities and cash without further delay.
RECOMMENDATION 12. ENSURE EFFECTIVE BUSINESS CONTINUITY AND DISASTER RECOVERY PLANNING.

All market participants should, and all systemically important institutions must, regularly review, update, and test their business continuity and disaster recovery plans, including evaluation of reliance on third parties, to ensure with reasonable certainty that critical operations will continue with a high level of integrity and sufficient capacity following a disruption or disaster.

RECOMMENDATION 13. ADDRESS THE POSSIBILITY OF FAILURE OF A SYSTEMICALLY IMPORTANT INSTITUTION.

Market participants in each financial center should work together to identify those institutions, or parts thereof, that are systemically important to the clearing and settlement process. User groups should be established to address how they would react if, despite strengthened business continuity and disaster recovery plans, there were a failure for whatever reason at one of these institutions. Ways of mitigating the risks created should a systemically important institution fail, such as building a real-time data depository, should be evaluated. Where it is determined that effective and feasible solutions may exist, detailed business cases setting out the costs and benefits should be built up, and decisions on future actions and investment decisions should be taken accordingly. As well as enforcing suitably high standards of business continuity and disaster recovery planning in systemically important institutions, regulators and overseers should encourage this process of industry-wide contingency evaluation and planning.

RECOMMENDATION 14. STRENGTHEN ASSESSMENT OF THE ENFORCEABILITY OF CONTRACTS.

Market participants should ensure that due diligence procedures examine contract enforceability, including basic formation and validity, as well as power and authority to contract.

RECOMMENDATION 15. ADVANCE LEGAL CERTAINTY OVER RIGHTS TO SECURITIES, CASH, OR COLLATERAL.

Market participants must be able to determine, with certainty and reasonable cost and effort, what law defines and governs their rights to securities, cash, or collateral in a clearing and settlement system or other intermediary, what those rights are, and how to perfect and enforce them.

RECOMMENDATION 16. RECOGNIZE AND SUPPORT IMPROVED VALUATION METHODOLOGIES AND CLOSEOUT NETTING ARRANGEMENTS.

Market participants should ensure that master agreements provide that upon the early termination of a transaction or group of transactions, the determining party will have the flexibility to value such transactions by the method that is most likely to produce a commercially reasonable valuation at the time of termination. Market participants should include closeout netting provisions in their contract documentation. Relevant authorities in each jurisdiction should ensure that their laws give effect to closeout netting for all central counterparties, brokers, end users, and other market participants, and for all entity, transaction, and asset types.

IMPROVING GOVERNANCE

RECOMMENDATION 17. ENSURE APPOINTMENT OF APPROPRIATELY EXPERIENCED AND SENIOR BOARD MEMBERS.

Members of the boards of securities clearing and settlement infrastructure providers should, individually and collectively, be of a weight in terms of experience and seniority to discharge the enlarged strategic, risk, and operational management oversight responsibilities described in this report.

RECOMMENDATION 18. PROMOTE FAIR ACCESS TO SECURITIES CLEARING AND SETTLEMENT NETWORKS.

Boards of securities clearing and settlement service providers, other organizations providing similar services, and public authorities should ensure
that rules and other requirements that control or limit access to securities clearing and settlement services are accepted only where they are necessary and are designed exclusively for the purpose of controlling financial, operational, reputational or regulatory risks; maintaining the safety of the system; or achieving other reasonable public policy objectives. Networks and services should be accessible to all users that pass risk and safety evaluations and enjoy appropriate financial standing, and users should be free to select the mix of functions and services that they wish to use on the basis of straightforward, transparent, and fair tariff policies grounded on the principle of user pays.

RECOMMENDATION 19. ENSURE EQUITABLE AND EFFECTIVE ATTENTION TO STAKEHOLDER INTERESTS.
Board participation should represent different stakeholder interests fairly and equitably. Provision should be made for regular review of, and for changes as necessary in, board composition to ensure continuing balanced representation of varying stakeholder groups, including users.

RECOMMENDATION 20. ENCOURAGE CONSISTENT REGULATION AND OVERSIGHT OF SECURITIES CLEARING AND SETTLEMENT SERVICE PROVIDERS.
Providers of securities clearing and settlement services should be subject to consistent and transparent regulation and oversight, which should focus on the activities undertaken and risks incurred. Standards of regulation and oversight of cross-border activity should be complementary and consistently applied across all relevant jurisdictions. As a long-term goal and where coherent with other public policy objectives, regulatory and oversight standards should be harmonized.