# BROOKINGS DISCUSSION PAPERS IN INTERNATIONAL ECONOMICS

No. 152

# STANDARDS AND PRUDENTIAL OVERSIGHT FOR AN INTEGRATING WORLD FINANCIAL SYSTEM

Ralph C. Bryant

November 1999

Ralph C. Bryant is a Senior Fellow and the Edward M. Bernstein Scholar in the Economic Studies Program of the Brookings Institution. This paper was presented at the October 28-29, 1999 Meeting of the Tokyo Club Foundation for Global Studies held at the Royal Institute of International Affairs (Chatham House) in London England. The material in the paper draws on a book-length manuscript currently in preparation, entitled *Turbulent Waters: Cross-Border Finance in the 21st Century*, to be published by the Brookings Institution in 2000. The views expressed are those of the author alone and should not be attributed to the trustees, officers, or staff members of the Brookings Institution.

Brookings Discussion Papers in International Economics are circulated to stimulate discussion and critical comment. They have not been exposed to the regular Brookings prepublication review and editorial process. References in publications to this material, other than acknowledgment by a writer who has had access to it, should be cleared with the author or authors.

# Standards and Prudential Oversight for an Integrating World Financial System

## ABSTRACT

This paper focuses on international aspects of accounting and auditing; data collection and dissemination; legal processes and institutions, especially for insolvency and bankruptcy; and the prudential supervision and regulation of financial institutions (for short, "prudential oversight"). The governmental institutions in these areas together constitute what may be termed the collective-governance infrastructure for financial activity. The paper first identifies basic issues and problems in these areas, and then suggests general principles that should guide international cooperation in formulating standards and prudential oversight at the world level. Significant progress has been made in these areas in recent years, and a section of the paper summarizes that progress. The final parts of the paper discuss some controversial issues that remain to be resolved: the allocation of responsibilities among international financial institutions, adoption by individual nations of international accounting standards, the introduction of collective-action clauses into bond contracts, and the evolution of capitaladequacy requirements for banks. The material in the paper is drawn from the author's book manuscript currently in preparation, *Turbulent Waters: Cross-Border Finance in the 21st Century*, to be published by the Brookings Institution in 2000.

Ralph C. Bryant Economic Studies Program Brookings Institution 1775 Mass. Ave., NW Washington, DC 20036 USA Email: rbryant@brook.edu

Why Reform the International Financial Architecture?		1
Accounting, Audit, Data, and Legal Systems: Main Issues		4
Rationales for the Prudential Oversight of Financial Institutions		9
Prudential Oversight: Main Issues		10
General Principles for Standards and Prudential Oversight at the World Level		15
The Current Status of International Cooperation on Standards and Prudential Oversight Accounting and Auditing Standards Standards for Data Collection and Dissemination Standards for Insolvency and Bankruptcy Supervision and Regulation of Banks Supervision and Regulation of Securities Markets Supervision and Regulation of Insurance Standards and Supervision for Payments Systems Joint Forum on Financial Conglomerates Financial Stability Forum BIS Committee on the Global Financial System Corporate Governance Standards Core Principles for Fiscal Policies and Monetary-Financial Policies	22 23 24 25 27 28 28 28 28 29 30 30 30 31	22
Allocation of Responsibilities Among International Institutions		32
Some Further Controversial Issues Adoption by Individual Nations of International Accounting Standards Collective-Action Clauses in Bond Contracts The Evolution of Capital-Adequacy Requirements for Banks	35 37 38	35
Conclusion		40
References		41

## Why Reform the International Financial Architecture?

I am dissatisfied with the nuances, sometimes even the main thrust, of most discussions about reforming the international financial architecture. I therefore begin this paper by sketching, in very broad strokes, what I believe to be the fundamentals of the subject. I stress some basic political constraints and equally basic economic imperatives.<sup>1</sup>

The political structure of the world is multi-layered, heterogeneous, and inherently conflictual. The second half of the 20th century has been characterized by increasing political pluralism -- a marked expansion in the number of governmental decisionmaking units and a greater diffusion of power among them. Increasing political pluralism was in turn accompanied by rising nationalism.

Increasing integration among national economies has been a second pervasive trend in the past half century. Lending and borrowing, with assets and liabilities denominated in several different national currencies as well as domestic currency, have become progressively "internationalized," and at a pace even faster than for cross-border trade in goods and services.

Despite the fact that economic and financial interdependence has greatly increased, national borders continue to have immense significance in economic terms. Nations are substantially different -- in their social and cultural norms, historical experiences, types of private institutions, types and jurisdictions of government institutions. Many nations still maintain partial "separation fences" at their borders (though much less so than at mid-century). It is a basic characteristic of free-enterprise capitalism that market extremes can cause market failures. It is a basic characteristic of pluralist politics that government extremes and rigidities can cause government failures. Virtually every nation therefore has a "mixed economy," some combination of decentralized markets and governance infrastructures. But the particular combination -- the specifics of the "mixed economy" -- differs widely across nations. All these cross-nation differences help to explain why national borders still have great economic significance despite the intensification of cross-border integration and the "globalization" of culture brought about by modern communications technology.

The world polity and economy at the end of the 20th century are thus at messy, intermediate stages of evolution. The political structure is so heterogeneous and multi-layered as to seem bewildering. Economic structure is neither fish nor foul. Any sensible approach to international financial architecture must grapple with this hybrid, intermediate messiness.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> In old-fashioned times, one spoke of the international monetary system, or the international financial system, or international financial institutions. In 1998, to suggest that there can be something new under the sun, governmental participants in international discussions agreed to use the term "architecture" instead of "system." I am not especially fond of architectural terminology in this context, but on terminology I bow to recent fashion.

<sup>&</sup>lt;sup>2</sup> Journalism and popular discussion in the last few years now assert sweeping but superficial generalizations about "globalization." Some, for example Thomas Friedman (1999), view the trends approvingly. Others, such as Greider (1997) and Gray (1999), perceive them as alarming and try to incite antipathy. Much of this popular commentary about globalization is unhelpful in understanding the intermediate messiness of today's actual world. For a cogent overview of how much national borders still matter, see Helliwell (1998).

In this intermediate world, collective-action problems with cross-border dimensions will continue to grow in importance relative to domestic governance. National governments will thus inevitably be forced to cooperate more among themselves and to ask international institutions to carry out a wider range of functional responsibilities. Reform of the international financial architecture, at its deepest level, is thus about the evolution of international collective governance for the world financial system.

Financial activity, when it functions smoothly, is enormously beneficial in promoting growth and efficient resource allocation. It permits the diversification and sharing of risk. It allows ultimate savers and ultimate investors to make independent localized decisions, yet render the decisions consistent in the aggregate. Completely unconstrained financial activity, however, may not be able to deliver these benefits. Informational asymmetries, adverse selection and moral hazard, informational cascades and herding behavior and contagion, and excessive volatility in asset prices cause financial activity to be inherently vulnerable to instability.<sup>3</sup>

The appropriate societal response to this dilemma is to establish and maintain a collective-governance infrastructure for the financial system. Within an individual nation, the critical features of this infrastructure include high standards for accounting, auditing, and information disclosure; well-designed and competently administered legal procedures for enforcing contracts and adjudicating disputes; skillful prudential supervision and regulation of private financial institutions; an effective but limited potential for crisis management and crisis lending ("lender-of-last-resort" provisions); and, not least, sound and predictable macroeconomic policies that shape the general environment within which the financial system and the wider economy operate.

If a well-functioning collective-governance infrastructure is a precondition for a domestic financial system to operate smoothly, why isn't an analogous infrastructure needed <u>on</u> <u>a world scale</u> for the smooth operation of the conglomeration of all national financial systems?

One's intuition wants to respond that the same logic does apply at the world level. And the *economic* aspects of the logic are, indeed, persuasive. *If* there could exist global, supranational analogues to the functions carried out within domestic financial systems by nations' central banks and supervisors of financial institutions, the global economy and financial system could evolve in a more smooth and stable manner.

*If* cabbages were horses, all could ride like kings. But cabbages are not horses. And because the *political* preconditions do not exist in our messy intermediate world, the logic cannot be fully applied to the global financial system. The global polity does not yet contain collective-governance institutions that can effectively carry out the functions of a supranational utilities infrastructure.

The international community has only recently begun to develop recommendations for minimum global standards in the areas of accounting, auditing, and data collection and dissemination. There exists no world legal system, no infrastructure of international courts or legal bodies for the resolution of cross-border disputes. Even for private entities, cross-border

<sup>&</sup>lt;sup>3</sup> These benefits and problems are summarized in my forthcoming book, Bryant (2000). Analytical references on the origins of financial instability include Diamond-Dybvig (1983), Bikhchandani-Hirshleifer-Welch (1992), Banerjee (1992), and Avery-Zemsky (1998). Masson (1998, 1999a, 1999b) focuses on the cross-border aspects.

contract defaults and insolvencies, and hence cross-border procedures for arbitration or bankruptcy, pose serious difficulties. When sovereign governments or entire nations are involved, the difficulties are an order of magnitude still more difficult. The world has only nascent supranational institutions, with very limited responsibilities, for the prudential oversight of financial activity. The issues of crisis management and crisis lending on a global scale are several times more complicated than the issues faced within a national economy by a national central bank. The world does not have global or regional monetary policies as distinct from the separate monetary policies of individual nations. Similarly, the notion of global or regional fiscal policies is an oxymoron. Procedures for intergovernmental cooperation among the fiscal authorities and the monetary authorities of the largest nations are in their infancy.

Given the need for further evolution of international collective governance -- but recognizing the hybrid, intermediate status of the world polity -- one has to be practical about how to make progress. In key areas, we should encourage a stretching of intergovernmental cooperation. We ought to support a further strengthening of international institutions. This approach, which I like to label <u>pragmatic incrementalism</u>, does not retreat from the need gradually to strengthen international collective governance. But neither does it unrealistically demand too much, too soon. Positioned in the middle of the road, pragmatic incrementalism is distanced from the ditch on the right-hand side that is the extreme <u>untrammeled markets view</u> and removed from the extreme in the other direction, the left-hand ditch of the <u>sweeping</u> institutional reform view.

The untrammeled markets view sees governance failures as pervasive, at both the national level and the nascent international level. In that view, efforts to mount governmental action are more likely to be "the problem" than a "solution." That view thus retreats from collective governance and hopes that markets themselves will cope resiliently with any difficulties that materialize.

In sharp contrast, the sweeping institutional reform view sees market failures as pervasive, internationally as well as domestically. It believes that financial markets periodically go out of control, especially with cross-border transactions, and thus wants either to rebuild the separation fences at national borders or else to delegate greatly enhanced Neither the untrammeled markets view nor the authority to international institutions. sweeping institutional reform view is based on compelling analysis. Both views, furthermore, are politically unrealistic. Market failures and financial turbulence put great pressure on governments to "do something." The untrammeled-markets advice to "Don't do something! Just stand there!" almost invariably buckles under crisis-generated political pressure (usually, appropriately so). For evidence on this point, witness the last two years of post-crisis intergovernmental discussions preoccupied with reforming financial architecture! On the other hand, the sweeping institutional reform view badly misjudges political constraints. Over the next decade or two, political considerations are unlikely to permit a radical increase in the authority of existing international institutions. Creation of additional international institutions, de novo, will be at least as constrained by political difficulties. The cosmopolitan dream of establishing global federalist governmental institutions -- the beginnings of a world government -- stands no chance of fulfillment until, at the earliest, many decades into the future. Political leaders retain many illusions about the effective degree of their nation's sovereignty. They fail to adequately appreciate the difference between *de jure* and *de facto* sovereignty. National governments therefore encourage the international institutions only to tiptoe rather than to

4

move briskly towards the establishment of a nascent world utilities infrastructure.

The paper will now turn to a subset of the institutions constituting a collectivegovernance infrastructure for financial activity. The focus is on the areas of accounting and auditing; data collection and dissemination; legal processes and institutions, especially for insolvency and bankruptcy; and the prudential supervision and regulation of financial institutions (for short, "prudential oversight"). I identify basic issues and problems in these areas, and then general principles that should guide international cooperation in formulating standards and prudential oversight at the world level. Significant progress has been made in these areas in recent years, and a section of the paper summarizes that progress. The final parts of the paper discuss some controversial issues that remain to be resolved: the allocation of responsibilities among international financial institutions, adoption by individual nations of international accounting standards, the introduction of collective-action clauses into bond contracts, and the evolution of capital-adequacy requirements for banks.

## Accounting, Audit, Data, and Legal Systems: Main Issues

Mistakes and accidents occur even within a well-functioning domestic financial system. Particular investments in real capital turn out to be disappointments. Financial transactions associated with those investments, and with other individual financial claims, go sour. Mistakes and accidents -- *mishaps* is a convenient shorthand term -- are inevitable in an economy in which the actors are fallible human beings, uncertainties and risks are rife, and asymmetric-information and principal-agent complexities abound.

What happens when, because of a mishap, a financial contract cannot be, or is not, fulfilled? Sometimes the lender and borrower can agree to rewrite their contract. Alternatively, the allocation of losses from a defaulted contract and the resolution of disputes may be submitted to arbitration. In still other cases, defaults may trigger recourse to litigation. Bankruptcy proceedings may ensue after a default, leading to one or another method of allocating some or all of the defaulting borrower's assets to its creditors. If the mishap has been severe enough to render a borrower insolvent (that is, causing the value of assets to fall below the value of all liabilities), bankruptcy proceedings of some sort will be inevitable. Defaults, insolvencies, bankruptcies, arbitration mechanisms for dispute resolution -- all these are inescapable features of capitalist economies with complex financial systems.<sup>4</sup>

Because of the inevitable mishaps, a smoothly functioning financial system must be supported by procedures for monitoring and enforcing contracts and for working out the consequences when particular financial contracts are not honored. Standardized and widely accepted procedures for accounting and auditing are necessary accompaniments for successful monitoring and enforcement. The collection, aggregation, and widespread dissemination of

<sup>&</sup>lt;sup>4</sup> Such events are unfortunate in many ways. They generate losses for individuals and costs for the economy. However, given the pervasive uncertainties and risks, coupled with periodic innovations in the economy, they also have a beneficial silver lining. Mistakes <u>should</u> lead to losses, in part to create incentives that will reduce the chances of mistakes in similar financial contracts made in the future. Accidents are often associated with fundamental changes in the economy, reducing the profitability of some types of economic and financial activity and increasing the profitability of others. Obsolescent products and industries should be phased out.

data about the activities of financial institutions are basic requirements. The legal system must provide a foundation of laws and rules that facilitate the resolution of disputes about contracts and the handling of defaults and insolvencies.

Sound accounting standards, demanding audit practices, and dissemination of accurate data are important because the economy and financial system cannot allocate resources efficiently if the information available about businesses and financial institutions is seriously incomplete or misleading. Full, timely, and accurate disclosure of financial results and other information material to investment decisions is a necessary -- albeit not sufficient -- condition for the appropriate identification and pricing of risks. Standardized norms and rules for presenting information, applied consistently over time, mitigate the difficulties of comparing the financial performances of different businesses and financial institutions. Standardized audit procedures -- providing for periodic reviews by outside, independent auditors of internal control mechanisms and financial statements-- ensure truthful, timely disclosure and facilitate the legal verification of contracts. Data for individual institutions, and aggregative data for sectors and the entire economy, are an indispensable foundation for the evaluation of risk.

The legal system identifies property rights and their status relative to other rights; establishes procedures for resolving disputes about how financial contracts are written and interpreted (including rules for how and when disputes can be brought into courts of law); governs what practices are appropriate in the monitoring, enforcement, and legal verification of contracts; and sets out rules to condition arbitration procedures as an alternative to court proceedings. The default and bankruptcy provisions of the legal system are especially critical for the financial system.<sup>5</sup>

The basic rationale for bankruptcy procedures is again to promote the efficient allocation of resources in the economy. A good bankruptcy procedure should, as much as possible, preserve the ex post value of the debtor. By providing the debtor with temporary protection from its creditors and possibly with access to interim finance with some form of *de facto* seniority, bankruptcy procedures enable an enterprise whose value as a going concern exceeds its break-up value to continue to operate. To this end, it may be necessary to protect the debtor enterprise from creditors who wish to invoke remedies available to them individually as a result of the non-performance of the debt contract. But a good bankruptcy procedure should also penalize the debtor (in the case of a business enterprise, its management) in order to provide adequate ex ante incentives for the debtor to manage its assets well while undergoing bankruptcy. By specifying ex ante rules for the distribution of partial or delayed payments on impaired debt claims among different creditors -- and more broadly for an appropriate distribution of the debtor's ex post value across its creditors (one that respects the priority of claims among the various classes of creditors) -- bankruptcy procedures reduce uncertainty and make it easier for markets to price risk.

The legal provisions governing bankruptcy are necessarily complex: they require a subtle balancing of the rights and obligations of debtors and creditors. Hence the objectives of bankruptcy are partly in conflict. The bankruptcy laws must encourage adherence to the ex

5

<sup>&</sup>lt;sup>5</sup> Bankruptcy can take a variety of forms, such as liquidation of the defaulting borrower's assets or business, receivership (a third party selected to run the business and work out the consequences), structured bargaining supervised by a third party, or administration of the assets or business by a judge or other court-appointed official.

ante provisions of financial contracts. If debtors were not substantially penalized in bankruptcy, future debtors would be tempted to escape from their financial contracts by resorting to bankruptcy. At the same time, the bankruptcy laws seek to prevent an uncoordinated, costly "grab race" among creditors that could lead to a fire-sale dismantlement of the debtor's assets and a collective loss to all parties that is much larger than the losses that would otherwise occur through a cooperative bargaining process. The great difficulty in the design of bankruptcy laws is to strike the best possible balance between the competing objectives.

The preceding summary of basics entirely leaves out complications stemming from multiple nations, different currencies, exchange rates among currencies, and cross-border transactions. For nations with advanced financial institutions, the occurrence of a mishap in domestic finance usually triggers well-developed remedial procedures. For cross-border finance, however, these underpinnings exist in only a rudimentary way. In the case of many developing nations, they are egregiously weak. Cross-border finance is thus plagued by four awkward and highly significant facts: an internationally standardized set of accounting and audit procedures does not exist; data for cross-border, and even domestic, assets and liabilities for many nations' financial systems are often either unavailable or unreliable; international law is much less well developed than nations' internal legal systems; and there exists no "world" legal system, nor any universally accepted method of resolving differences among national legal systems.

Differences across nations in the norms and standards for business and financial accounts can be large. The substantive content of accounts, perhaps especially for financial statements, varies from one nation to another. National practices are sometimes in direct conflict. Traditions differ about the amount and timing of disclosure, and the degree of reliance to place on formal audits. A single example illustrates the point. When a bank's loan becomes non-performing in some nations, only the unpaid installment of the bad loan is considered past due in the reporting of the bank's condition. In other nations, however, the entire loan -- current unpaid installment and all future installments -- is classified as non-performing if any installment payment is overdue. The latter accounting standard is obviously much more stringent than the former, and more likely to signal future difficulties.

Deficiencies in accounting practices, audit standards, and the availability of accurate data appear to have been a significant underlying contributor to financial crises throughout past history.<sup>6</sup> They are widely perceived to have contributed to the financial crises in Asia and elsewhere in 1997-98.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> See, for example, Bordo, Eichengreen, and Irwin (1999).

<sup>&</sup>lt;sup>7</sup> One of the Group of Twenty-Two's reports in the fall of 1998, for example, summarized the "damaging consequences" of accounting deficiencies in the following terms: "In many Asian countries, the absence of consolidated financial statements for related companies and, more generally, poor accounting practices hid serious financial weaknesses -- the result of bad lending or investment decisions -- in the corporate and banking sectors and contributed to the misallocation of resources that led up to the crisis. Faced with inadequate information about firms' financial performance, investors and creditors appeared to give issuers and borrowers the benefit of the doubt until the crisis broke and then to assume the worst after problems became apparent." Group of Twenty-

During the last several years, cooperative efforts to design an agreed set of global accounting standards have been undertaken through the auspices of the International Accounting Standards Committee (IASC). The standardization of auditing procedures has been discussed through the International Federation of Accountants (IFAC). International discussions about standards for securities firms have taken place under the aegis of the International Organization of Securities Commissions (IOSCO), and for the activities of insurance companies through the International Association of Insurance Supervisors (IAIS). Notable improvements in the collection, aggregation, and dissemination of financial data in recent years have been made by the International Monetary Fund (IMF), the Bank for International Settlements (BIS), and the World Bank. Later in the paper, I summarize the activities of these world institutions and the progress on nascent international standards that has been made through them.

Consider next the complications for legal-system issues stemming from cross-border transactions. Problems have arisen for centuries, of course, in which a plaintiff and a defendant -- individuals, or firms, or organizations -- are residents of different nations. Thus numerous volumes concerned with one or another aspect of international law reside on the bookshelves of courts and some lawyers. Even so, there are few institutional mechanisms for formal arbitration procedures and for reconciling differences among national legal systems.

The International Court of Justice (ICJ) is, in principle, an exception. The ICJ, located in the Hague in the Netherlands, is the principal judicial organ of the United Nations. It was created in 1946 as the successor institution to the Permanent Court of International Justice (created under the League of Nations in 1922). The functions of the ICJ are two: "to settle in accordance with international law the legal disputes submitted to it by States, and to give advisory opinions on legal questions referred to it by duly authorized international organs and agencies."<sup>8</sup> Opinions differ widely about the authority that the ICJ has in fact, and should have, and how well it performs the functions assigned to it. As its mandate makes clear, however, one significant fact is beyond controversy: non-governmental entities such as private businesses and financial institutions are not able themselves to initiate cases at the ICJ.

The relatively new dispute settlement mechanisms in the World Trade Organization (WTO) can now help to reconcile trade-policy features of national legal and regulatory systems.<sup>9</sup> The United Nations Commission on International Trade Law (UNCITRAL) and the International Bar Association have catalyzed international discussions about model standards for insolvency and bankruptcy, to be summarized below. Every international institution has its own history of legal precedents and their status vis-a-vis national laws.<sup>10</sup>

Nonetheless, the overwhelming fact remains: the institutional mechanisms for reconciliation of differences among national legal systems are few in number and limited in scope. The Supreme Court and the subsidiary court systems in the United States have

Two, *Report of the Working Group on Transparency and Accountability* (October 1998, p. 5).

<sup>8</sup> General information about the International Court of Justice can be obtained from their web site: www.icj-cij.org.

<sup>9</sup> Jackson (1998), Ostry (1999), Petersmann (1998).

<sup>10</sup> For example, for the International Monetary Fund see Gold (1984, 1990).

sufficient political authority to be regarded as a third branch of the U.S. government. The legal system and its enforcement in many other nation states have an analogously strong political standing. None of the international legal institutions or procedures has a comparable political muscle for resolving cross-border legal issues.

Given that bankruptcy procedures require a subtle balancing of competing objectives, one should expect that differing national cultures and social norms will suggest different points along the subtle tradeoffs. And that in fact is the case:

...the legal authorities available to deal with a financial insolvency vary greatly from country to country, often based on quite different social preferences, with different priority assigned to protection of creditors, borrowers, employees, and shareholders. Some are well tested and provide a fair and effective basis for working out competing claims with the national context; others much less so. In addition, virtually none were written with attention to the cross-border dimensions of an insolvency, offering no mechanism for dealing with matters outside of home jurisdiction or reconciliation of national differences. There is therefore substantial scope for conflict and miscalculation.<sup>11</sup>

In a situation of domestic insolvency when the national bankruptcy code is implemented, the issue of appropriate legal jurisdiction never arises. The creditors and debtor have no uncertainty about which system of national law applies. But which bankruptcy procedures should apply for a cross-border (and often a cross-currency) contract, those of the debtor's nation or those of the lender's? The design of a contract itself can resolve the most obvious aspect of the uncertainty by spelling out in advance which nation's law applies as the "proper law of the contract." But in real life, complex situations can easily arise where the differences among national legal jurisdictions become important.<sup>12</sup> More generally, just as contracts cannot be "complete" in all their domestic dimensions, many types of cross-border legal contingencies cannot possibly be foreseen. The incremental uncertainties arising from the cross-border aspects of a contract turn out to be especially problematic. For domestic contracts, there at least exists a single, unambiguous legal jurisdiction for the resolution of disputes about the consequences of unforeseen contingencies. Dispute resolution for the inevitable, unforeseen contingencies of cross-border contracts is troubled by the lack of clarity about whether multiple national legal jurisdictions are relevant and how differences between the jurisdictions are to be reconciled.

So-called sovereign borrowing, where the debtor is the government of a sovereign nation and incurs liabilities to creditors in different foreign nations denominated in several

<sup>&</sup>lt;sup>11</sup> The quotation is from a summary overview of a report by a Group of Thirty Study Group (1998, p.4).

<sup>&</sup>lt;sup>12</sup> Consider an example in which a firm in nation A borrows from a lender in nation B with a contract specifying that the law of B applies, but also borrows from a lender in C with a contract written to specify that the law of C applies. If the borrower in A becomes insolvent, an important feature of domestic bankruptcy law will be absent: no court system will have jurisdiction over the totality of the debtor's obligations, and hence be able to compel all dissident creditors to accept an orderly, generally agreed restructuring of the debtor's liabilities and assets.

foreign currencies, can be especially problematic. National governments may default on debt contracts, and have fairly often done so. But there is no simple sense in which an entire nation can be insolvent or undergo bankruptcy proceedings.

#### **Rationales for the Prudential Oversight of Financial Institutions**

Within individual nations, broad agreement exists that the government cannot accept a residual responsibility for the stability of the national financial system -- and in particular cannot stand ready to provide "lender-of-last-resort" support in a crisis -- unless it also engages in supervision and regulation of financial institutions to ensure sound practices and prevent excessive risk-taking. The term *prudential oversight* is a convenient shorthand for these supervision and regulation functions.

Emergency action in financial crises by a lender of last resort, if taken, even if merely anticipated in non-crisis periods, creates a moral-hazard dilemma. If private financial institutions can confidently count on a lender of last resort extending assistance on a stormy day, on sunny days they may have insufficient incentives to behave prudently in their own lending decisions. Because the lender of last resort is expected to provide assistance in emergencies, it must encourage potential recipients to behave in a way that reduces -- or at the least does not increase -- the probability that emergencies will occur, and if emergencies should occur and assistance has to be extended, that reduces the private and social losses incurred.<sup>13</sup> Prudential oversight is thus analogous to the establishment of minimum-standard building codes that help to minimize the damage from real-life earthquakes and hurricanes. It has similarities to land-use, zoning policies that discourage people from living in exposed flood plains, in low-lying coastal areas exposed to hurricanes, or on top of geological faults where earthquake risk is unusually high.

Smooth operation of the payments mechanism is important for the stability of a nation's financial system. Most policymakers and analysts thus believe that the government, as part of its functions as overseer of the soundness of the financial system, should regulate, and thereby protect the integrity of, the society's payments mechanism.

Deposit insurance for deposits held in financial intermediaries is yet another dimension of prudential oversight. If some agency of government provides deposit insurance, moralhazard considerations are again relevant. Such insurance can play a helpful role in reducing the likelihood of stormy-weather runs on the intermediaries, thereby helping to dampen the spread and intensity of financial distress. But the classic case against a guarantee of deposits is precisely the other side of the coin: by mitigating the threat of withdrawal of deposits, deposit insurance thereby removes a check on imprudent risk-taking and irresponsibility by the management of the intermediaries. If the government does decide to provide deposit insurance, it will also be driven to concomitant supervision and regulation of the intermediaries to reduce the moral-hazard problem that would otherwise exist.

The preceding rationales for prudential oversight are *macroprudential*, driven by a concern for systemic stability of the financial system. Many analysts and policymakers would also identify a *microprudential* rationale, driven by concerns with the stability of individual financial institutions and the protection of individual consumers. The goal of microprudential

<sup>&</sup>lt;sup>13</sup> Stiglitz (1994) provides an overview of the prudential-oversight roles of the government in financial markets.

oversight is to avert inappropriate conduct or the failure of particular institutions, thereby protecting individuals with deposits or other claims on the institutions and the local communities who depend on the lending activities of the institutions.

A prudential-protection rationale for the supervision and regulation of financial institutions does not raise issues or problems peculiar to purely financial institutions. Some defenders of the microprudential rationale, however, do believe it to be peculiarly applicable to financial intermediaries. The balance between microprudential and macroprudential rationales also depends on which types of intermediaries are the focus of the supervision and regulation. For example, the macroprudential motives are particularly important for banks and the payments system, whereas microprudential motives get relatively greater weight as a justification for the regulation of brokerage firms and institutional investment funds.

Still another family of arguments, a *concentration-competition* rationale, can be advanced to justify the supervision and regulation of financial institutions. The contention is that prudential oversight is required to obviate an undue concentration of economic power. Unlike the macroprudential and even the microprudential rationales for oversight, the concentration-competition rationale is not distinctively applicable to financial institutions. Financial intermediaries and financial markets do pose some special regulatory issues because the nature of their business differs from that of nonfinancial organizations. But the same general issues of concentration and competition arise in connection with virtually all types of economic activity in the private sectors of mixed capitalist economies.

# **Prudential Oversight: Main Issues**

The government officials responsible for supervising and regulating financial institutions -- for short, the supervisors -- will formulate and implement a wide range of policies (the multiplicity being driven by the multiple rationales just summarized). The supervisors can set licensing and authorization procedures for the establishment of new financial institutions. A prospective licensee will have to satisfy minimum criteria; the supervisors can reject applications that do not meet the criteria. The supervisors will also probably have authority to review proposals for the transfer to other parties of ownership or controlling interests in a financial institution, and to deny the transfer if appropriate criteria are not met. The supervisors may set minimum requirements for a financial institution's capital adequacy (net worth), and monitor whether financial institutions satisfy the requirements. The supervisors will establish guidelines to proscribe activities by the financial institutions deemed illegal or undesirable. Alternatively, they will have the authority to evaluate such guidelines developed by the institutions themselves.<sup>14</sup> The supervisors may monitor the procedures that financial institutions use to assess the creditworthiness of borrowers and the quality and riskiness of individual assets. They may evaluate the techniques used for management of the overall riskiness of the institutions' balance sheets. The supervisors may set guidelines or

10

<sup>&</sup>lt;sup>14</sup> Examples of the activities deemed to be undesirable include fraud, the use of an institution for criminal purposes, cornering the market in particular securities, trading abuses (e.g., so-called front running) in securities markets, and insider misconduct and self-dealing. So-called connected-lending abuses -- when the officers of a financial institution make low-interest loans to themselves, relatives, or other officers -- are an illustration of insider self-dealing.

evaluate own-institution guidelines designed to prevent an undue concentration of assets or excessive exposure to single borrowers or groups of borrowers. Finally, and perhaps most important, the supervisors will try to ensure that a financial institution maintains adequate and transparent accounts, that it has in force adequate procedures for external audits, and that it publicly discloses information, including audited financial statements, that correctly reflect its condition.

The supervisors confront many difficult issues as they exercise prudential oversight. One of the most general is the relative degree of reliance to be placed on market-based incentives versus direct, explicit regulations. Prudential oversight relying on market-based, incentive-based regulations will often be less costly. For example, it would be prohibitively expensive to review all the actions of each financial institution's officers to ensure that no insider misconduct and self dealing have occurred. Even when direct regulations are feasible, moreover, they may be a poor mechanism for achieving supervisory goals. The supervisory officials implementing direct regulations may fall prey to regulatory forbearance or even regulatory capture (see below). When market-based, incentive-based regulations that operate indirectly rather than directly are possible, they usually will also prove preferable. Requirements that financial institutions disclose timely and accurate information about their financial condition are a prime example. Disclosure of an institution's financial condition can permit market forces to do a substantial part of the needed enforcing and monitoring. A deterioration in the institution's condition, if transparent to the wider community, will be punished by declines in the market price of the institution's stock (and uninsured debentures, if any). Those declines will in turn put pressure on the institution's management to take corrective action. The pressures also work in reverse: transparent disclosure of information about a safe and well-managed institution's condition will enable it to obtain more favorable terms and conditions in its relations with its investors and creditors than those available to institutions perceived as more risky.

Market-based regulations align the incentives of the supervisors and the regulated institution's owners and managers. Requirements that an institution maintain adequate capital are an important example of a market-based, incentive-based regulation. A capital-adequacy requirement gives managers and owners a strong incentive to be prudent. If the institution acts imprudently and goes bankrupt, the owners have a lot to lose. Conversely, if an institution's net worth is allowed to fall below some low threshold, managers and owners will be tempted to become risk loving rather than risk averse. Consider a bank that gets into trouble. If the bank's managers and owners were to have only a small equity stake in the bank because the capital-adequacy requirements were set very low, they could be tempted to "go for broke," taking on new highly risky loans such as the financing of an expensive new sports stadium in a distant suburb. If the new stadium does not catch on, bad luck -- but the supervisors were going to close you down anyway. If the big bet on the stadium does pay off, the bank will look golden. The owners and managers will enjoy the upside gains -- if there are upside gains. But the downside risks to them are small because so little of their own money is at stake. The bank is thus tempted to act like a football team that is behind late in the fourth quarter; ordinarily, a "Hail Mary" pass would be too risky, but in a go-for-broke context such a pass might win the game.

The setting of standards for capital adequacy, however, is less straightforward than it might appear at first blush. A financial institution's net worth is measured with uncertainty

and error. Its portfolio of assets continuously fluctuates in value, but many of the assets may not have a current market price. Accounting standards, if lax, may permit the understatement of losses or their transfer to the balance sheet of related institutions. Net worth is calculated only at periodic dates. An institution's managers thus may have significant influence over the measurement of its net worth and an incentive to report to the supervisors an optimistic calculation. If net worth could be monitored accurately and consistently, the supervisors could set a relatively low standard for minimum net worth and promptly close down an institution whose net worth fell below the required minimum. But with substantial lags and uncertainties in measurement, the supervisors will be forced to set a higher minimum standard to be sure that the true value of the institutions's capital is above a target minimum level. A high minimum standard raises the probability that the supervisors will not have to deal with an actually negative net worth if they must eventually close an institution. The other side of the coin, however, is that supervisors may inappropriately constrain growth of the financial sector if they set the minimum standard excessively high.

In principle, the supervisors would also like to take into account variability in value of the institution's assets when setting a target minimum standard for capital adequacy. One type of such risk-based capital standards might, for example, treat government treasury bills as less risky than commercial loans or equity claims. With this approach, supervisors have to define the relative riskiness of broadly defined categories of assets and then set an appropriate minimum standard for the ratio of eligible capital to total assets weighted by their risks. Critics of such risk-based capital standards may take issue with the asset classes chosen by the supervisors or the particular weights the supervisors assign to them. Even more fundamentally, critics argue that the approach itself is misguided because the overall risk of the institution's entire portfolio, which is the relevant risk, cannot be adequately captured by the definition of asset classes and relative weights attached to the classes. Alternative approaches to the definition of capital adequacy thus include "credit risk modeling" of the entire portfolio (done with complex mathematical models, and perhaps undertaken by the supervised institution itself rather than by the supervisors) or a requirement that part of an institution's capital take the form of subordinated debentures actively traded in a financial market.

The details of capital-adequacy requirements are messy and controversial. Broad agreement exists that capital-adequacy requirements are socially desirable, not least because they take advantage of market incentives that align the objectives of the supervisors and the supervised institution. Yet as the preceding summary suggests, decisions about the details of the capital standards themselves entail choices between market-based incentives versus direct regulations specified by the supervisors.<sup>15</sup>

Some types of prudential regulation must inevitably take the form of direct restrictions rather than market-based incentives. Restraints on "abuse" transactions (such as insider misconduct and market cornering) and on "inappropriate ownership" transactions (excessive lending to a single entity) are examples. The purpose of regulations prohibiting insider misconduct and self dealing is in part to prevent owners or better informed investors from taking unfair advantage of less informed individuals. Such situations are still other examples of information asymmetries that lead to market imperfections. Though the supervisors cannot

<sup>&</sup>lt;sup>15</sup> Capital-adequacy requirements have a controversial status in international discussions about standards and prudential oversight, and are discussed further below.

ignore such problems, direct regulations to deal with them are difficult to formulate, and may also lend themselves to government failure. In a loose sense, consensus exists that rigged markets will have thin trading and will not function well, and are therefore socially undesirable. Because asymmetric information is a core characteristic of financial activity, however, trading in securities is necessarily based on differences in information. How much and what sorts of information supervisors should require to be disclosed will thus inevitably be controversial. Some analysts would argue that detailed government regulations can make matters worse rather than better; in that view, *caveat emptor* should be the primary guiding principle.

Though the design of standards and regulations for prudential oversight is a key part of the supervisors' responsibilities, monitoring and enforcement are equally essential. Without sufficient monitoring -- and enforcement if necessary -- the best-designed regulations could prove to be merely hortatory rather than actually binding. Issues of market-based incentives versus direct supervision are relevant for monitoring as well as for design. Extensive disclosure requirements facilitate indirect monitoring by private-sector investors. Private agencies that assess creditworthiness and that rate securities can complement the monitoring activities of the supervisors. Private rating agencies and other complementary private-sector organizations, however, cannot deal with all potential externalities or abuses, and thus cannot be a complete substitute for direct monitoring by the supervisors.

Who monitors the monitors? What if the supervisors themselves fail to execute their responsibilities appropriately? Supervisors may succumb to what is known as regulatory capture, that is, excessive affinity between the regulators and the regulated. Bribery and corruption are extreme forms of regulatory capture. Lesser varieties, such as regulatory forbearance, are more subtle but potentially just as serious. *Regulatory forbearance* occurs when the supervisors inappropriately postpone corrective action against a financial institution that is failing to comply with supervisory requirements (for example, permitting an institution to continue to operate if its capital appears to have fallen below the minimum standard). It is human nature to hope that currently perceived problems will correct themselves with the passage of time. Politicians and government officials may have an added incentive to rely on such hopes since any costs of postponed action may be born, not by themselves, but by their successors in office.

One proposed solution to the problem of regulatory forbearance is to require that supervisors follow strict, ex ante guidelines for their intervention in particular situations rather than relying on discretionary judgment. But strict rules are not a magic bullet. Invariably, there is a tradeoff between rules and discretion. Simple rules, rigidly enforced, could lead to closures of healthy institutions that should not be shut down, or to continued operation of unhealthy institutions that really ought to be closed. Less rigid enforcement of rules, permitting greater discretion to the supervisors, will reduce the likelihood of such mistakes but raise the probability of mistakes from regulatory forbearance.<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> New legislation adopted in the United States in 1991, known by the acronym FDICIA, effected changes in the supervision and regulation of depository institutions that were intended, in part, to reduce the incidence of regulatory forbearance. The new legislation included provisions for "prompt corrective action" (PCA), requiring the supervisors to take prompt action if an institution's capital ratio falls below a specified

Within individual nations, difficult institutional questions about monitoring and enforcement have to be resolved. The broadest question is whether all the collectivegovernance functions of the financial system's utilities infrastructure (not merely standards and prudential oversight but also monetary policy and lender-of-last-resort crisis management) should be lodged in a single institution or, at the other extreme, be parceled out to different government agencies. At first blush, the question can be narrowed by focusing only on the standards and oversight functions and asking whether those functions should be carried out by a single government institution or alternatively by multiple agencies. Because prudential oversight is so interrelated with monetary and lender-of-last-resort policy, however, the broader form of the question often is an issue. In particular, should responsibility for general monetary policy and crisis lending be combined with, or separated from, prudential oversight? Neither normative arguments nor practical experience have been sufficient to generate a consensus on the matter.

Advocates for separating prudential oversight from general monetary policy tend to be concerned about a possible conflict of interest between the two functions. In times of troubled conditions, it can be argued, a central bank with supervisory responsibilities may be tempted to maintain interest rates at a lower level than would be warranted by general monetary policy because of a concern about the adverse effects of higher rates on the profitability and solvency of financial institutions under its supervision. (Such behavior would be a subtle form of regulatory forbearance.) Some tension seems inevitable between the objectives of monetary policy and maintaining systemic stability on the one hand and the microprudential objectives of regulation on the other.

Yet separating the two sets of functions would not necessarily make the resolution of that tension easier. If supervisory and regulatory responsibilities were lodged in a separate agency outside the central bank, occasions might arise in which the officials in charge of monetary policy, fearful of systemic stability, would want to provide emergency lending to particular financial institutions whereas the supervisory officials, fearful of moral-hazard precedents and possible losses from insolvencies, would instead recommend no emergency lending and liquidation of the institutions. Such conflicts between objectives will have to be resolved in any case, whether the prudential-oversight functions have been given to a separate government agency or whether all the functions are lodged together in the central bank. Advocates of keeping the monetary-policy and prudential-oversight functions together also observe that the central bank would have to be deeply involved in crisis lending to particular institutions even if the formal authority for supervision were given to a separate agency. According to this view, decisionmaking would be less balanced and less efficient with a separation.

The institutional allocation of the prudential-oversight functions also depends on how the residual costs of liquidating insolvent institutions are born. If substantial amounts of taxpayer money have been and will in the future be used to cover such costs, closure decisions will have an especially high political content. In such circumstances, it may seem politically more natural to lodge the authority in a part of the government other than the central bank. Central banks themselves may even feel relieved, and feel their reputations may be less subject

level. See for example Garcia (1995), Dahl and Spivey (1995), and Benston and Kaufman (1997).

to tarnish, if prudential oversight is formally located elsewhere.

Thus it is not clear whether prudential oversight and the monitoring of standards is likely to be better handled when under its own roof, or in combination with monetary policy under the roof of the central bank. Nor is it clear whether general monetary policy and crisis lending are better conducted together with, or separated from, prudential oversight. The most careful study of the question observes that the arguments for combination and for separation are both inconclusive. About half of the nations examined in that study separate the functions and the other half combine them.<sup>17</sup>

The preceding review of main issues in the prudential oversight of financial institutions has scarcely mentioned multiple nations and cross-border transactions. As with accounting, auditing, data, and legal systems, international aspects cause an already complicated set of issues to become that much more complex and difficult. While economic logic argues for an extension of individual nations' collective-governance infrastructures to a global infrastructure for prudential oversight, moreover, the political constraints impede dramatic progress.

Nonetheless, intergovernmental cooperation for prudential oversight does have a significant forward momentum. The relevant international institutions are the Basle Committee on Banking Supervision (BCBS), the IMF, the World Bank, the International Organization of Securities Commissions (IOSCO), the International Association of Insurance Supervisors (IAIS), and the Committee on Payment and Settlements Systems (CPSS). Other cross-institutional mechanisms have recently been established: the Joint Forum on Financial Conglomerates (Joint Forum), the Financial Stability Forum (FSF), and the Committee on the Global Financial System (CGFS). The BCBS, the CPSS, and the CGFS are committees operating under the auspices of the BIS. These nascent efforts at international cooperation for prudential oversight are summarized below.

# General Principles for Standards and Prudential Oversight at the World Level

The perspective of pragmatic incrementalism suggests seven general principles as anchors for international cooperation in designing and implementing standards and prudential oversight at the world level:

- 1) Responsibility for improved standards and prudential oversight must begin, and end, at home.
- 2) Standards and oversight at the world level should take the form of "core principles" rather than detailed "codes" or fully specified regulations.
- 3) The preferred approach at the world level is an encouragement of *agreed minimum standards* combined with the presumption of *mutual recognition*.

<sup>&</sup>lt;sup>17</sup> Goodhart and Schoenmaker (1993, 1995). A wide range of institutional arrangements prevail among nations with regard to which entity of government bears exclusive or primary responsibility for the supervision, regulation, and oversight of financial activity. A few nations have designated a single agency as responsible for supervising and regulating a wide range of financial institutions (e.g., banks, securities firms, insurance companies) and financial markets (e.g., securities exchanges, derivatives, commodity exchanges). For most nations, however, the oversight responsibilities for financial activity are shared among several government agencies.

- 4) When possible, world standards and oversight should rely on market incentives rather than direct restrictions.
- 5) World standards and oversight should highlight disclosure and transparency.
- 6) Monitoring and enforcement of world standards and oversight will eventually be at least as important as sound design.
- 7) Improvements are especially needed in emerging-market and developing nations, but the advanced industrial nations need to make improvements too.

The principle that responsibility for improvements must begin and end at home is a pragmatic reminder that, for the foreseeable future, supranational institutions will have little political authority. Yes, there will be continued erosion of the *de facto* sovereignty of nations. But the *de jure* political responsibility for taking actions about standards and prudential oversight will remain exclusively at the level of national or subnational governments. Collective design and collective monitoring at the world level can critically shape a supportive world environment that encourages individual national governments to take appropriate actions. Even so, it is strengthened standards and oversight <u>implemented within individual</u> nations that are the *sine qua non* of improved stability for the world financial system.

My second principle -- that cooperatively developed standards and guidelines at the world level should take the form of "core principles" rather than detailed "codes" or fully specified regulations -- is again derived from political pragmatism. For most, if not all, substantive issues, it is premature to try to obtain worldwide intergovernmental agreement on detailed codes and regulations. National governments may be able to accept core principles and guidelines, but typically they will prefer -- often with justification -- to adapt the core to the particular indigenous characteristics of their own situations.

Political constraints likewise underpin the principle that standards and guidelines for the world as a whole should take the form of *agreed minimum standards* combined with the presumption of *mutual recognition*. This preferred approach can be distinguished from the negotiation of *harmonized standards* applicable to the world as a whole.

Explicit harmonization across nations is a much more ambitious and controversial approach. It would require substantial departures from the existing world political situation in which decisions by national governments are essentially decentralized. It would also require a substantial further strengthening of international institutions. In contrast, mutual recognition presumes a continuation of decentralized decisions by national governments. Mutual recognition does entail some degree of intergovernmental cooperation because it presumes exchanges of information and consultations among governments that will constrain the formation of national regulations and policies. As understood in discussions of economic integration within the European Union, for example, mutual recognition entails an explicit acceptance by each member nation of the regulations, standards, and certification procedures of other EU members.<sup>18</sup> Governments may agree on rules that restrict their freedom to set policy or that promote gradual convergence in national policies. As international consultations and monitoring of compliance with such rules become more important, one can describe this

<sup>&</sup>lt;sup>18</sup> For example, mutual recognition allows a financial institution licensed in any EU country to operate in all EU countries even when licensing and supervision standards in member countries differ.

#### situation as monitored mutual recognition.

Many differences among nations in standards, regulations, policies, institutions, and even social and cultural norms create economic incentives for a kind of arbitrage that erodes and may ultimately eliminate the differences. Explicit harmonization tries to anticipate the result of such arbitrage pressures for areas for which differences among nations are perceived as inequitable, unstable, or ultimately unsustainable. Mutual recognition instead relies on market competition among nations to guide the process of eventual international convergence.

Proposals for harmonized global standards rather than mutual recognition are often driven by a yearning for a worldwide "level playing field." Differences across nations in standards or regulations often lead to complaints that the behavior of some *other* nation is competitively inequitable, with an associated recommendation that the *other* nation should adjust its policies to moderate or remove the competitive inequities. But such complaints, and the yearning for a level playing field in the world economy, are problematic. Cross-border transactions occur precisely because of differences among nations -- in resource endowments, labor skills, and consumer tastes. Nations specialize in producing goods and services in which they are relatively most efficient. In a fundamental sense, cross-border transactions are valuable because the playing field is *not* level.

Carried to its logical extreme, the yearning for leveling the playing field implies that nations should become homogeneous. But a recommendation for homogenization -- for sweeping harmonization -- is not only unrealistic. It is misguided. Suppose nation X is poor and through its political process decides that its government cannot afford the costs of maintaining a large core of supervisors and regulators to oversee its financial system (thereby, of course, accepting higher risks that the nation may experience financial instability). Or suppose nation X concludes that it cannot afford stringent environmental protections against business practices that pollute local air and water supplies. Nation X will then argue that it is inappropriate for other nations to impute to it the value they themselves place on a clean environment and high-quality prudential oversight of the financial system (just as it would be inappropriate to impute the X valuations to the environment and prudential oversight in the other nations) . The core of the idea of political sovereignty is to permit national residents to order their lives and property in accord with their own preferences. Seen from this perspective, the notion of a level world playing field is an unhelpful mantra, a rule of thumb that misleads as often as it conveys a sound objective for equity across nations.

Two perspectives about the differences among nations coexist in situations of this sort. Each has some merit. Nation X can be seen as merely exercising its national preferences in setting national standards, appropriately exploiting its comparative advantage even if that leads to a less stable banking system and production of goods that threaten the environment. But because of cross-border spillovers, a legitimate problem may also exist that justifies pressure from other nations urging X to accept changes in its policies (thus curbing X's national sovereignty). When national governments negotiate resolutions to such questions -- trying to agree whether individual nations are legitimately exercising sovereign choices or, alternatively, engaging in behavior that is unfair or damaging to other nations -- the resolutions typically entail compromise between the two competing perspectives. The approach of agreed minimum standards combined with the presumption of mutual recognition will often result in such compromises. For issues where a minimum standard applied in all nations is likely to be desirable for cosmopolitan world goals (for example, stability of the world financial system as a whole) and for the goals of each nation individually considered, adoption of world <u>minimum</u> standards will be the preferable outcome. But at the same time, individual nations will be free to adopt standards more stringent than the agreed minimum. The acceptance of mutual recognition permits differences among nations, acknowledging the axiom of different strokes (policies) for different folks (nations).

Existing efforts to achieve intergovernmental agreement on standards and guidelines have for the most part followed the two preceding principles. To the best of my knowledge, detailed codes and full-scale harmonization have not been attempted. The main exceptions have been regional rather than worldwide, in particular certain attempts at harmonized, universally applicable regulations within the European Union.<sup>19</sup>

Over a longer run, the arbitrage pressures eroding differences among nations will probably induce governments to make more and more attempts at explicit harmonization. This conjecture applies to standards for accounting, auditing, data dissemination, and bankruptcy. It might apply to aspects of prudential oversight. It seems likely to apply to the taxation of the returns to capital.<sup>20</sup> Thus a future time may come when the cooperative approach preferred today, agreed minimum standards combined with mutual recognition, will have been superseded. But the distance to that future time is doubtless measured not in years but in decades or half centuries.

In a domestic context within individual nations, standards and prudential oversight that rely on market incentives will usually, when feasible, prove preferable. Essentially the same principle applies to standards and prudential oversight designed to cover cross-border financial transactions, and the world financial system as a whole.

The traditional points about market-based, incentive-based oversight summarized in the earlier discussion are especially pertinent for nations facing resource constraints more binding than those in advanced industrial nations. A small, relatively poor developing nation, for example, simply cannot afford a large staff to implement supervision and regulation through detailed direct restrictions. Tight constraints on governance resources are thus a strong argument for relying on incentive-based supervision and regulation for those aspects where such an approach is feasible.

The fifth of my general principles is that standards and oversight designed at the world level should highlight disclosure and transparency. A close link exists between the degree of

<sup>&</sup>lt;sup>19</sup> I admit to some uncertainty about my generalization on this point. In the areas of accounting, auditing, and legal standards, it may be that some of the efforts can be characterized as attempted harmonization and detailed code rather than merely core principles for minimum standards.

<sup>&</sup>lt;sup>20</sup> Differences in the taxation of capital across nations is a major motivation for many types of cross-border capital flows. This fact undermines the case that unfettered capital movements are beneficial for efficient resource allocation. Whereas today we can observe large differences in the taxation of capital across nations, it may become harder and harder over time for nations to maintain such large differences.

disclosure about individual financial institutions and the ability of supervisors to rely on market-based, incentive-based regulations (as emphasized earlier). Without ample disclosure of institutions' accounts and behavior, with the information readily available globally, an emphasis on incentive-based oversight instead of direct explicit regulations cannot be successful.<sup>21</sup>

Significant differences exist across nations in the legal authority that supervisors have to set disclosure standards. The supervisors in some nations have the power to implement disclosure requirements directly through binding regulations. In other nations, the supervisors do not have that power, and thus have to rely on indirect encouragement, such as by issuing "sound practice recommendations." An emphasis on disclosure and transparency in the design of world standards can, among other things, provide encouragement to individual nations to strengthen the powers of their supervisors to require greater disclosure.

Ample disclosure of accurate and timely information about individual financial institutions is useful because it helps to reward safe and well-managed institutions while exerting market pressures on institutions that are excessively risky and poorly managed. It is worth noting here that analogous arguments apply even to individual nations as a whole. A nation will find itself rewarded in global capital markets with lower borrowing costs and more generous inflows of foreign-generated savings if it can demonstrate that it has strong accounting and auditing standards, well-managed financial institutions, sound macroeconomic policies, and reliable and comprehensive aggregated data for its financial system and economy.

And the global capital markets tend to punish a nation by denying it capital inflows and depreciating its currency if it has weak standards, weak prudential oversight, unreliable data, and unsound macroeconomic policies. From the perspective of the stability of the global financial system, this market disciplining is beneficial on balance.

I say "on balance" in the last sentence because financial markets are also prone to informational cascades, herding behavior, and contagion -- behavior alluded to in the cliché that financial markets know only two gears, overdrive and reverse. Thus any rewarding or punishing carried out by the markets can be exaggerated, and thereby exacerbate underlying problems or spark undesirable exuberance. Principal-agent complexities and their associated information asymmetries are endemic features of financial activity. Ample disclosure of information and the market discipline that results are beneficial features of prudential oversight. But they are not a panacea for financial stability.

Standards and guidelines at the world level must first be designed before they can be used as tools to catalyze improved standards and oversight within individual nations. But -principle six -- the international community will eventually have to put even more emphasis on monitoring and enforcement than on design. Self-evidently, sound world standards, even when fully agreed, must be actually implemented before most of the associated benefits can be generated.

Because responsibility for improvements must begin and end at home, the bulk of monitoring and enforcement activity necessarily has to take place within individual nations carried out by each nation's collective-governance infrastructure. This is certainly true for the

<sup>&</sup>lt;sup>21</sup> The Group of Twenty Two *Report of the Working Group on Transparency and Accountability* (October 1998), chaired by Mervyn King and Andrew Sheng, usefully emphasizes these disclosure issues.

monitoring of individual private financial institutions. Difficult institutional and substantive issues arise at the purely national level, such as whether to have a single or multiple agencies carry out prudential oversight and how to minimize the risks of regulatory forbearance. Different nations resolve these issues quite differently, which complicates the application of world standards and guidelines and the monitoring of compliance with them.

At the world level, the question of "who monitors the monitors?" takes on additional dimensions. Some sort of assessment of whether individual nations are or are not conforming to the (minimum) world standards will be increasingly desirable. Political pragmatism suggests that for the shorter run the international community might aim for a combination of self-assessment at the national level with overview assessment by international institutions such as the IMF, the BIS, and the World Bank. Such assessments might concentrate initially on a transparent description of a nation's existing standards and practices.<sup>22</sup> As intergovernmental cooperation evolves over the longer run, a day may eventually come when supranational prudential overseers provide a detailed assessment of the quality of a nation's practices (design and enforcement), thereby explicitly reprimanding or applauding the national supervisors.

In a later section, I consider the issues of how responsibilities for supranational monitoring and enforcement should be allocated among the various international institutions.

For most of the last half century, discussions of international financial reform neglected problems in emerging-market and developing nations. Those nations, however, were integrally involved in the financial turbulence characterizing recent years -- for example the debt crisis of the 1980s, the Tequila Crisis set off by Mexico in 1995, the virulence of Asian financial crises in 1997-98, and the worldwide credit-risk scare triggered by the August 1998 Russian devaluation.

Accounting, audit, and data standards in emerging-market and developing nations tend to be less well developed, and often are less strongly enforced than in North America, Europe, and Japan. The laws governing defaults and insolvencies are less complete. Bankruptcy and arbitration procedures are less fully worked out. Standards and procedures for prudential oversight of financial institutions in many developing nations are less stringent, and often less assertively monitored.

The economies of many developing nations are smaller and more open. Herding behavior and contagion can be more virulent, and there is therefore somewhat more risk of national financial instability. Portfolio investors and creditors from the advanced industrial nations -- the dominant actors in the world capital markets -- can be very unforgiving about problems within the developing nations. Many such creditors are potential members of a herd, prepared to exercise a disciplining "exit option" on slight provocation, especially if through informational cascades they observe other creditors heading for the exit.

It is thus unquestionably appropriate that financial problems in emerging-market and developing nations have moved to the front of the stage and are primary targets for many reform proposals. For their own sakes as well as for the sake of global financial stability, these nations should make improvements in standards and prudential oversight.

Today's conventional wisdom, however, appears to hold that the problems in the international financial system are, if not exclusively, then at least predominantly located in

<sup>&</sup>lt;sup>22</sup> See International Monetary Fund, Report on *International Standards and Fund Surveillance -- Progress and Issues* (1999).

emerging-market and developing nations. This conventional wisdom, emanating from the advanced industrial nations, tends to be self-satisfied, even self-righteous. The industrial nations are perceived as a splendid first team -- the "varsity," spruced up and washed clean. The emerging-market nations are at best a weak "junior varsity." And the "unwashed" of the developing nations are merely amateur sandlot teams. Seen from this unfortunate perspective, the enemy is weak private institutions and weak governance in the emerging-market nations and the developing nations.

I am much more in the frame of mind of Pogo: we have met the enemy, and the enemy is us, too! It is surely wrong to imply that all is well on the varsity team. The industrial nations have plenty of their own problems about standards and prudential oversight, and the conventional wisdom ought to be better aware of the industrial nations' contributions to the architectural problems that need fixing.

It is salutary to remember the protracted savings and loan crisis in the United States in the 1980s. Recall the exchange-rate turbulence in Europe in 1992 and again in 1993, and the associated severe banking crises in Scandinavia. Throughout the second half of the 1990s the Japanese financial system has been struggling with huge amounts of bad debts, many weakened financial institutions, and fundamental questions about Japan's implementation of prudential supervision and regulation. Within most industrial nations, there remain controversial issues about the appropriate details of deposit-insurance schemes and the implementation of capitaladequacy requirements. Issues of regulatory forbearance and moral hazard are pervasive.

Many private and government participants in North American, European, and Japanese financial systems, for example, acquiesce in the presumption that some banks (possibly even some nonbank financial institutions) are "too big to fail." That presumption creates severe moral-hazard difficulties for prudential oversight. In effect, large banks may be said to enjoy the benefits of <u>implicit</u> deposit insurance without having to bear the costs of it. This issue has important spillover implications for the cross-border lending and borrowing carried out by the allegedly too-big-to-fail institutions. The international interbank market, for example, played a major funding role for Asian emerging-market nations in the 1990s. In effect, large banks based in the advanced industrial nations carried out a major risk transformation -- transferring deposits from large multinational banks to financial intermediaries in developing nations of lower credit standing -- combined with a major maturity transformation -- turning short-term <u>implicitly insured</u> deposits into long-term loans. When the Asian crisis broke, of course, the large multinational banks all ran together for the exit. This example is a reminder that, in a significant sense, "moral hazard begins at home" in the advanced industrial countries.<sup>23</sup>

When focusing on the need for improvements in standards and prudential oversight in all economies, it is also instructive to bring in a historical perspective. Until well into the 20th century, the United States, Canada, and Australia were "emerging-market" nations. London and several other European capitals were the advanced center of the financial world and had considerably more sophisticated financial institutions and practices than those in the United States. The United States had, to put the point politely, an altogether undistinguished record of financial stability. The phrase "wildcat banking" stems from flagrant abuses in 19th-century American banking. Severe financial panics occurred in the United States in 1873, 1893, and

<sup>&</sup>lt;sup>23</sup> The quoted phrase is from Mervyn King (1999). For a recent analysis of moralhazard issues in the international interbank market, see Bernard and Bisignano (1999).

again in 1907. The United States in the 19th century certainly failed to have adequate mechanisms in place for the prudential oversight of private financial institutions and for the collective provision of emergency liquidity assistance in times of financial crisis.

Accounting, audit, and data standards in the United States and in so-called newly settled nations such as Canada, Australia, and Argentina were less well developed and less strongly enforced than in Britain. Bankruptcy and arbitration procedures were less fully worked out. Standards and procedures for prudential oversight of financial institutions were less well developed, less stringent, and less assertively monitored. Most of the generalizations so readily applied to developing nations today were applicable with at least equal merit to the then-emerging nations at the beginning of the 20th century. The historical experience of the United States and the other emerging-market nations of the 19th century also teaches the lesson that the transfer of stringent standards from advanced to periphery nations is a slow-moving, learning process. The gradual historical strengthening of U.S. accounting procedures and prudential oversight, for example, was due in large part to pressure from British investors and imitation of British standards.<sup>24</sup>

If the international community is to encourage an appropriate evolution of collective governance for the world financial system, the supposed varsity team should be more careful about pointing the finger of blame exclusively at the junior varsity and the sandlot players and telling them that they must pull up their socks.

#### The Current Status of International Cooperation on Standards and Prudential Oversight

I now turn to a summary of progress that has been made in international cooperation on standards and prudential oversight for financial institutions and financial activity. The summary is doggedly descriptive ("Just the facts, ma'am"). The reader therefore runs no risk of cardiac arrest from over-excitement. Acronym overload, on the other hand, may cause indigestion. Notwithstanding possible dullness and indigestion, I hope this summary will be a useful overview for those not trying to follow these areas in detail.

Accounting and Auditing Standards. The International Accounting Standards Committee (IASC) is a private-sector body based in the United Kingdom, first established in 1973, with membership (in 1999) of some 142 professional accountancy organizations in 103 countries. Its goal is to "achieve uniformity in the accounting principles that are used by businesses and other organisations for financial reporting around the world." Membership in the IASC does not require that member organizations or their nations adopt the international accounting standards (IASs) that are developed. Whether a nation in fact adopts an IAS depends on the decisions of its national authorities or the nation's self-regulatory organizations.

The IASC is the primary institutional mechanism for catalyzing cooperation among nations about accounting standards. In 1995, it made a commitment to IOSCO (the International Organization of Securities Commissions) to produce a comprehensive core set of accounting standards that IOSCO could recommend for adoption by IOSCO's member countries. The IASC in March 1999 published for the first time a "comprehensive standard on accounting for financial instruments" (known as International Accounting Standard IAS 39), which takes several steps forward toward the goal of global standards.<sup>25</sup>

<sup>&</sup>lt;sup>24</sup> See, for example, Bordo-Eichengreen-Irwin (1999).

<sup>&</sup>lt;sup>25</sup> On the origins and history of the IASC, see Cairns (1998). For the March 1999

Nascent cooperative efforts have been undertaken to promote the standardization of auditing procedures through the International Federation of Accountants (IFAC). IFAC is an organization closely associated with the IASC and with similar membership (a member in the IFAC automatically is a member in IASC). IFAC has developed international standards on auditing (ISAs) and international audit practice statements (IAPSs) through its International Auditing Practices Committee. The standards developed by IFAC and its Committee do not have legal force, but member organizations are expected to use their best efforts to see that IFAC and IASC standards are used as a basis for developing their own nations' standards and practices. IFAC is said to encourage its members to undertake self review of their nations' auditing practices to evaluate how they compare with IFAC's international auditing standards.

The International Organization of Supreme Audit Institutions (INTOSAI) links together national institutions whose responsibilities are to audit government agencies and to promote sound financial management and accountability within governments. INTOSAI was founded in 1953 and adopted a *Lima Declaration of Guidelines on Auditing Precepts* in 1977. In the 1990s INTOSAI issued international standards for auditing government agencies and guidelines for achieving effective internal accounting controls within government agencies.<sup>26</sup>

IFAC, collaborating with the IMF, the World Bank, and global private accounting firms, established an International Forum on Accountancy Development in February 1999. Its stated purpose is to support efforts to strengthen international financial architecture through the building of accounting and auditing capacity in developing and transition economies. This forum apparently made a commitment to "support the use of International Accounting Standards as the minimum benchmark" worldwide.

**Standards for Data Collection and Dissemination.** The IMF Articles of Agreement require member countries to provide the IMF with data about the member's economic and financial condition. Since the creation of the IMF half a century ago, therefore, the IMF has encouraged member countries to collect more comprehensive and more accurate data. The interaction between the IMF staff and statistical agencies within member governments has played a sometimes influential role in strengthening the countries' own statistical efforts, including the publication of more and better-quality national statistics. The World Bank and the BIS have also been important catalysts for member nations improving their data efforts. The three institutions have provided technical assistance, including manuals for the statistical agencies of national governments to use in collecting, aggregating, and publishing their data.<sup>27</sup> The IMF, World Bank, and BIS themselves publish numerous statistical volumes and reports. The OECD is also active in the compilation and publication of comparative national statistics.

In 1996, partly stimulated by the crisis following the 1994-95 Mexican devaluation, improvement of data for cross-border capital flows assumed a higher visibility and priority. A new emphasis was placed on nations making a wider range of data available to the general

standards, see IASC (1999).

<sup>26</sup> Information about INTOSAI can be found at the web site: www.intosai.org.

<sup>27</sup> Recall, for example, the IMF's *Balance of Payments Manual* and its *Manual of Government Finance Statistics* or the *Guide to the BIS Statistics on International Banking* (prepared by the BIS staff primarily for the use of the institutions which report the data to the BIS).

public, domestic and foreign citizens alike. (Previously, national governments had made some of the data available to the IMF but had not published it. And the IMF was required to treat as confidential some of the key data it received from member governments.)

The dominant new initiative was the establishment of a Special Data Dissemination Standard (SDDS) at the IMF, beginning in March 1996. Its purpose is to guide nations in the dissemination of economic and financial data to the public. By August 1999, there were 47 subscribing nations -- a mixture of industrial market economies, emerging-market economies, and transition economies. Participants in the SDDS are "countries that have, or that might seek, access to international capital markets." Four dimensions of data dissemination are emphasized in the SDDS: the coverage, periodicity, and timeliness of a nation's data; access to the data by the public; the integrity of the disseminated data; and the quality of the disseminated data. The SDDS prescribes "monitorable elements" for these dimensions -- good practices that can be monitored by the users of the statistics. Subscribers to the SDDS are required to submit information about their data and their dissemination practices to the IMF for presentation on the IMF's electronic Dissemination Standards Bulletin Board.

At the time the SDDS was initiated, its requirements were recognized as "very demanding and not necessarily applicable or relevant for the entire membership of the Fund." In December 1997, the IMF's Executive Board accordingly also established the General Data Dissemination System (GDDS). The GDDS is in principle applicable to all IMF members. The primary focus of the GDDS is stated as supporting improvements in data quality over time, "in contrast with the SDDS, where the focus is on dissemination in countries that generally already meet high data quality standards." The aspiration is thus for IMF members not yet able to adhere to the SDDS to gradually improve their efforts in data collection and publication, thereby eventually graduating to the SDDS. The GDDS is supposed to move into its "operational phase" in 2000.<sup>28</sup>

In March 1999, agreement was reached to strengthen SDDS prescriptions in the areas of debt and international reserves. SDDS subscribers agreed on a new "reserves template"; the revised standards for reserves are supposed to be in force in subscribing countries by March 2000.

Despite notable improvements in recent decades, serious weaknesses still exist in data pertinent for national financial systems and the world financial system. Data for the outstanding stocks of real capital assets exist for only a subset of nations, and are often of poor quality when they do exist. Only the wealthiest nations have devoted significant resources to creation of flows of funds accounts and associated data on the outstanding stocks of financial assets and liabilities. The data are especially weak for outstanding amounts of cross-border assets and liabilities, which makes it difficult or impossible to formulate national balance sheets and international investment positions for many countries.<sup>29</sup>

**Standards for Insolvency and Bankruptcy.** The United Nations Commission on International Trade Law (UNCITRAL) is the core legal body of the United Nations system in

<sup>&</sup>lt;sup>28</sup> The SDDS and the GDDS are described, and the national data of SDDS subscribers are accessed, through the web site of the IMF's Dissemination Standards Bulletin Board (http://dsbb.imf.org).

<sup>&</sup>lt;sup>29</sup> See Milesi-Ferretti and Lane (1999) for a recent discussion.

the field of international trade law. It was established in 1966 by the UN General Assembly, with a mandate to "further the progressive *harmonization and unification* of the law of international trade" (my italics). The Commission is composed of 36 member states elected by the General Assembly, with membership structured so as to be representative of the world's various geographic regions and its principal economic and legal systems. The Commission carries out its work through working groups and at annual sessions. In past years the Commission has produced a variety of legal documents. Examples include conventions or model laws on arbitration rules (1976); the carriage of goods by sea (the "Hamburg Rules" of 1978); contracts for the international sale of goods (1980); international commercial arbitration (1985); international credit transfers (1992); the procurement of goods, construction and services by governments (1994); and electronic commerce (1996).

The UNCITRAL document most relevant for financial standards and prudential oversight is the Model Law on Cross-border Insolvency, adopted in 1997. The purpose of the model law is to promote modern and fair legislation for cases where an insolvent debtor has assets in more than one nation. The law deals with "conditions under which the person administering a foreign insolvency proceeding has access to the courts of the State that has enacted the Model Law, determines conditions for recognition of a foreign insolvency proceeding and for granting relief to the representative of such foreign proceeding, permits courts and insolvency administrators from different countries to cooperate more effectively, and contains provisions on coordination of insolvency proceedings that place concurrently in different States." UNCITRAL has also published a *Guide to Enactment* to assist governments in preparing legislation based on the Model Law.<sup>30</sup>

The International Bar Association's Insolvency and Creditors Rights Committee is currently developing a *Model Insolvency Code*, which would provide a model for nations that are in the process of reforming and updating their insolvency laws. The World Bank is providing information to governments on good practices for reform of insolvency systems, including the role of specialist bankruptcy courts. The World Bank and the International Bar Association are apparently engaged in discussions on an initiative to develop guidelines for sound insolvency laws and the incentives for debtors and creditors to use insolvency mechanisms. The IMF has prepared a paper on effective and orderly insolvency procedures which the World Bank intends to use in its efforts to formulate guidelines for effective insolvency regimes in developing nations. The IMF and the World Bank are also collaborating with UNCITRAL in this area.<sup>31</sup>

**Supervision and Regulation of Banks.** The Basle Committee on Banking Supervision (BCBS) was established under the auspices of the BIS in 1975. Concerns generated by the Bankhaus Herstatt and Franklin National Bank crises in 1974 were the catalyst for that action. In the ensuing years the BCBS has become the most influential forum for catalyzing intergovernmental consultations and cooperation among banking supervisory authorities.

The BCBS's first major achievement was the drafting of a Concordat on the supervision

<sup>&</sup>lt;sup>30</sup> General information, the quotation in the text, and the language of the model law were obtained from the web site of UNCITRAL (www.uncitral.org).

<sup>&</sup>lt;sup>31</sup> Report of the Managing Director on Progress in Strengthening the Architecture of the International Financial System, IMF (1999, p.31).

of banks' foreign establishments, setting out agreed principles and guidelines covering the division of responsibilities among national authorities for the supervision of banks that operate in more than one national jurisdiction. The first version of the Concordat was agreed in 1975; a modified version was prepared in 1983; a supplement was agreed in April 1990. In 1992 certain of the principles of the Concordat were reformulated as "Minimum Standards." Other early achievements of the BCBS include agreements on the principle that banks' cross-border business should be monitored on a consolidated basis and on the appropriate accounting and supervisory treatment of off-balance sheet exposures.

At the June 1996 meeting of the Group-of-Seven (G-7) heads of state, the BCBS was asked to develop a set of principles for banking supervision that would, among other things, stimulate improvements in supervisory standards in emerging-market nations. In 1997, the Committee accordingly released a document entitled *Core Principles for Effective Banking Supervision*.

This BCBS document sets out a total of 25 core principles, grouped as: preconditions for effective banking supervision (principle 1); licensing and structure (2 - 5); prudential regulations and requirements (6 - 15); methods of ongoing banking supervision (16 - 20); information requirements (21); the formal powers of supervisors (22); and cross-border banking (23 - 25). The BCBS interprets the principles as "*minimum requirements*" and as a "basic reference for supervisory and other public authorities *in all countries and internationally*" (Press Statement of Sept. 22, 1997; the italics are mine rather than the Committee's). The intended eventual scope for these core principles is thus worldwide, to apply to all banks in each national jurisdiction.<sup>32</sup>

In 1997, the BCBS also released a *Compendium of Documents Produced by the Basle Committee on Banking Supervision.* This collection pulled together all the existing BCBS recommendations, guidelines and standards from the Committee's inception through April 1997. The *Compendium* is cross-referenced to the *Core Principles* and is to be periodically updated.

The BCBS has been especially active in releasing further documents in the last year. For example, it issued guidance or published papers on: sound practices for loan accounting, disclosure, and related matters (October 1998, July 1999); sound practices for banks' interactions with highly leveraged institutions such as hedge funds (January 1999); credit risk modelling (April 1999); managing settlement risk in foreign exchange transactions (July 1999); and enhancing corporate governance in banking organizations (September 1999).<sup>33</sup>

A BCBS working group is currently developing a draft handbook on methodology for banking supervision. This handbook is to be given final approval by the BCBS, probably

<sup>&</sup>lt;sup>32</sup> When developing the core principles, the BCBS consulted with national supervisory authorities not members of the Committee. The document was prepared in a group containing representatives from the BCBS and also Chile, China, the Czech Republic, Hong Kong, Mexico, Russia and Thailand. Nine other countries (Argentina, Brazil, Hungary, India, Indonesia, Korea, Malaysia, Poland, and Singapore) were described as "closely associated with the work."

<sup>&</sup>lt;sup>33</sup> All the BCBS documents and releases are available through the web site of the BIS (www.bis.org).

sometime in 2000.

During the 1980s, the BCBS became concerned that the capital positions of the banks engaged in cross-border business were deteriorating simultaneously with an increase in risks, especially vis-à-vis heavily indebted developing nations. In response, the Committee developed a set of international standards to use in measuring the capital adequacy of banks. The negotiations for these standards, which are known as the Basle Capital Accord, were protracted and difficult. The details of the capital requirements were controversial from their first adoption in July 1988, and have grown still more so with the passage of time. This aspect of the work of the BCBS is an especially noteworthy illustration of the difficulties that are associated with international cooperation for the development of standards.

Various amendments were made to the capital-adequacy standards during the 1990s. One of these, for example, incorporated changes in the treatment of credit risks associated with derivatives and similar off-balance-sheet instruments. In 1996, the capital requirements were extended to cover "market risk" rather than only "credit risk," and the Committee accepted, with specified safeguards, banks' own internal models of such market risks.<sup>34</sup>

The BCBS *Core Principles for Effective Banking Supervision* emphasize capital requirements. In particular, the wording of the 6th core principle emphasizes that:

Banking supervisors must set prudent and appropriate minimum capital adequacy requirements for all banks. Such requirements should reflect the risks that the banks undertake, and must define the components of capital, bearing in mind their ability to absorb losses. At least for internationally active banks, these requirements must not be less than those established in the Basle Capital Accord and its amendments.

Extensive modifications to the BCBS standards for capital adequacy have been under study during 1998-99. The Committee's proposals for possible changes were issued in a consultative document in June 1999.<sup>35</sup> Comments on these proposals have been solicited from interested parties, to be received by the end of March 2000. The intent is to issue definitive proposals sometime later in 2000. The proposals for revisions, like the Accord itself, have attracted considerable discussion and criticism (see further discussion below).

**Supervision and Regulation of Securities Markets.** The International Organization of Securities Commissions (IOSCO) is a counterpart on the securities side to the international prudential oversight for banking by the BCBS. IOSCO is an intergovernmental institution, based in Montreal Canada, with [164] members. It was created in the 1970s to promote cooperation and information exchanges among the national authorities with responsibility for regulating securities markets. It operates primarily through an Executive Committee, two specialized working committees, and annual conferences. Recommendations by IOSCO are advisory, rather than binding, on its members.

The contributions of IOSCO to the development of prudential standards for securities markets are summarized in two documents released in 1998: *Objectives and Principles of Securities Regulation* (a set of core principles for securities supervision) and *International Disclosure for Cross-Border Offerings and Initial Listings by Foreign Issuers* (a set of

<sup>&</sup>lt;sup>34</sup> See BIS, BCBS (1997) for the texts of the Accord and amendments through April 1997.

<sup>&</sup>lt;sup>35</sup> "A New Capital Adequacy Framework," BIS, BCBS (1999).

international standards for non-financial statement disclosure). The Technical Committee of IOSCO has carried out several projects with the BCBS. For example, in October 1999, IOSCO's Technical Committee and the BCBS jointly issued a paper on guidance for the public disclosure of trading and derivatives activities.

IOSCO's Technical Committee is currently evaluating the proposed international accounting standards developed by the IASC to determine whether IOSCO should endorse the IASC core standards for use by foreign issuers in cross-border listings and offerings. It is also considering mechanisms to increase the transparency of dealings of highly-leveraged institutions (HLIs) with securities firms, the advisability and feasibility of direct disclosure requirements for HLIs, recommendations that would strengthen risk managements processes at securities firms that act as counterparts to HLIs, and measures to improve information flows about HLI activities to regulators, market authorities, and the general public.<sup>36</sup>

**Supervision and Regulation of Insurance.** Nascent international cooperation for the supervision and regulation of insurance companies has been encouraged through the International Association of Insurance Supervisors (IAIS), established in June 1994. The members of IAIS are national insurance supervisors from more than 100 nations. The mandate of IAIS is to develop internationally endorsed principles and standards on insurance supervision and to assist insurance supervisors to implement those principles and standards through cooperation programs and training. As with IOSCO, the recommendations of IAIS are not binding on members but have merely an advisory status.

In 1996 the IAIS began work on internationally applicable principles for insurance supervision. A compendium of principles, standards, and guidance papers was issued in September 1997. Three additional standards -- covering licensing, on-site inspections, and supervision of derivatives -- were issued in September 1998.<sup>37</sup>

An IAIS Task Force has been created to "prepare a methodology for monitoring the implementation of the Principles." The methodology is to be prepared "in close collaboration" with other international organizations engaged in surveillance activities. The IAIS has solicited assistance from the World Bank in distributing the principles, standards and guidance notes to national insurance supervisors and in promoting implementation of the basic standards.<sup>38</sup>

**Standards and Supervision for Payments Systems.** The Committee on Payment and Settlements Systems (CPSS), under the aegis of the BIS, has a mandate to monitor and improve the safety and efficiency of payments systems with special emphasis on the global dimensions. Representatives to the Committee come from central banks. The Committee has constituted several working groups to prepare reports. For example, a Steering Group on Settlement Risk in Foreign Exchange Transactions completed a report on "Reducing Foreign Exchange Settlement Risk: A Progress Report" in July 1998. The CPSS released a report by its working group on retail payments systems in September 1999.

<sup>&</sup>lt;sup>36</sup> Report of the Managing Director on Progress in Strengthening the Architecture of the International Financial System, IMF (1999, p. 29).

<sup>&</sup>lt;sup>37</sup> Further information about IAIS can be obtained from its web site (www.iaisweb.org).

<sup>&</sup>lt;sup>38</sup> Ibid., p.29-30.

The CPSS has collaborated with the Technical Committee of IOSCO on several occasions. Joint reports were produced on a disclosure framework for securities settlements systems (1997) and on securities lending transactions (July 1999).

A task force of the CPSS -- composed of representatives from the G-10 nations, emerging-market economies, the IMF, the World Bank, and the European Central Bank -- is currently working to develop core principles for the design and supervision of payments systems. A report is due by the end of 1999.<sup>39</sup>

**Joint Forum on Financial Conglomerates.** Coordination among the preceding international organizations has become increasingly necessary. This need has given rise to several new institutional mechanisms.

The Joint Forum on Financial Conglomerates (Joint Forum) was created in early 1996 under the collective auspices of three parent organizations, the BCBS, IOSCO, and IAIS. The goal was to catalyze a more formal cooperation among the bank, securities, and insurance supervisory authorities from the largest nations. (A less formal Tripartite Group from the three types of supervisors prepared a report released in July 1995.) Thirteen nations are represented in the Joint Forum as of 1999: the G-7 nations plus Australia, Belgium, Netherlands, Spain, Sweden, and Switzerland. The European Union Commission attends in an observer capacity.

In February 1999, the Joint Forum released a series of papers on the supervision of financial conglomerates. These papers had been drafted and revised during 1998 following a study of 14 major international conglomerates and after "extensive consultation" with industry and the wider supervisory community. The papers covered techniques for assessing the capital adequacy of conglomerates; tests for the fitness and propriety of managers, directors and major shareholders of conglomerates; facilitation of the exchange of information among the various supervisors; and methods of coordinating the activities of the supervisors in emergency and non-emergency situations. The Joint Forum released further consultation documents in July 1999 discussing principles for the prudent management and control of intra-conglomerate transactions and exposures, and conglomerate risk concentrations.

**Financial Stability Forum.** The creation of the Financial Stability Forum (FSF) stems from the October 1998 meeting of the G-7 finance ministers and central bank governors. That meeting commissioned Hans Tietmeyer (then President of the Deutsche Bundesbank) to prepare a report with recommendations for "new structures that may be required for enhancing cooperation among the various national and international supervisory bodies and international financial institutions." The G-7 nations adopted the recommendations in Tietmeyer's report in February 1999 (see Tietmeyer (1999)). The first meeting of the FSF was convened in April 1999.

The FSF is designed to be an institutional mechanism for "enhancing cooperation among the various national and international supervisory bodies and international financial institutions so as to promote stability in the international financial system." It brings together, usually twice a year, "national authorities responsible for financial stability in significant international financial centres, international financial institutions, sector-specific international groupings of regulators and supervisors, and committees of central bank experts."<sup>40</sup>

<sup>&</sup>lt;sup>39</sup> Ibid., p.33.

<sup>&</sup>lt;sup>40</sup> The quotations are from the FSF's web site (www.fsforum.org).

The members of the FSF are national authorities from individual nations (one each from the finance ministry, central bank, and main supervisory agency in the largest nations); representatives from the IMF, the World Bank, the BIS, and the OECD; representatives of the primary international regulatory and supervisory groupings, namely the BCBS, IOSCO, and IAIS; and representatives from two committees of central bank experts, the Committee on the Global Financial System and the CPPS. The national authorities represented at the first meeting of the FSF were restricted to the G-7 nations. In June 1999, the membership was broadened to include "significant financial centres," interpreted as Hong Kong, Singapore, Australia, and the Netherlands. The FSF has a small secretariat based at the BIS. The first chairman of the FSF, for a term of three years beginning in 1999, is Andrew Crockett, who is also General Manager of the BIS.

One of the first initiatives of the FSF was to produce a *Compendium of Standards*, a common reference for the various economic and financial standards "that are internationally accepted as relevant to sound, stable and well-functioning financial systems." This compendium of standards goes well beyond bank supervision, though the BCBS has been closely involved in compiling it. The standard-setting bodies whose work is collected in the Compendium of Standards include the IMF, the BCBS, IOSCO, IAIS, the CPSS, and the OECD. The intent is to review and update the compendium on an ongoing basis.

Another initiative was to establish three working groups, on the activities of highly leveraged institutions in financial markets, on the uses and activities of offshore financial centers, and on the evaluation of policy measures that might be taken in borrower and creditor nations to reduce the volatility of capital flows and to improve the assessment and management of the risks of excessive short-term external indebtedness. These working groups have met several times in 1999 and, after further work, are expected to report to the full FSF by its third meeting in April 2000.

The FSF has also emphasized the training of financial supervisors. The World Bank, the IMF, and the BIS, acting under the auspices of the FSF, have jointly produced a draft *Financial Supervision Training Directory*. Later on, the directory is to be expanded to include training programs for securities and insurance supervisors. The stated objective of the *Directory* is to "contribute to raising the technical capacity and quality of management in supervisory authorities" "by improving awareness of the broad range of training programs available in financial supervision and regulation."

**BIS Committee on the Global Financial System.** During the 1960s, staff representatives of the central banks of the G-10 nations met informally at the BIS in a Eurocurrency Standing Committee. The G-10 central bank governors gave this committee a formal mandate in 1971, and made the mandate public in 1980, to monitor international banking markets more closely. The Eurocurrency Standing Committee focused initially on eurocurrency markets but subsequently discussed a wide range of financial-stability issues. A number of reports were published under the Committee's sponsorship. The Committee also had responsibility for developing and overseeing the various sets of BIS statistics on international banking, financial derivatives, and foreign-exchange market activity.

The G-10 central bank governors decided in February 1999 to clarify the mandate of this committee and to rechristen it the Committee on the Global Financial System (CGFS). The CGFS is to act as a central bank forum for "the monitoring and examination of broad issues relating to financial markets and systems with a view to elaborating appropriate policy

recommendations to support the central banks in the fulfilment of their responsibilities for monetary and financial stability." The tasks of the CGFS are foreseen as falling into three categories: systematic short-term monitoring of global financial system conditions; in-depth longer-term analysis of the functioning of financial markets; and the articulation of policy recommendations aimed at improving market functioning and promoting stability.

A working group of the CGFS, formed in December 1997 (prior to the change in name of the Committee), issued a report in May 1999 on "Market Liquidity: Research Findings and Selected Policy Implications." A second working group, formed in March 1999, has just released (October 1999) a detailed analysis of the turbulent market events in Autumn 1998.<sup>41</sup>

**Corporate Governance Standards.** The OECD and the World Bank have taken the lead in catalyzing international discussions in this area. The OECD Council, meeting at Ministerial level in April 1998, asked the OECD to develop an internationally applicable set of standards and guidelines for corporate governance. The resulting *OECD Principles of Corporate Governance* were endorsed at the May 1999 Ministerial meeting. These principles are described as non-binding; they "do not aim at detailed prescriptions for national legislation. Their purpose is to serve as a reference point."<sup>42</sup>

The World Bank has supported reform of corporate governance in developing nations through some of its lending operations. It had already undertaken several "corporate governance assessments" (CGAs) by September 1999 and was planning a further 12 such efforts in the following 6 months.<sup>43</sup>

The OECD and World Bank recently decided to establish a Global Forum on Corporate Governance. This Forum was launched in September 1999 at the IMF-World Bank annual meetings in Washington, DC.

The Joint Forum on Financial Conglomerates has focused attention on corporate governance issues for financial-sector institutions. As noted above, the BCBS issued a paper in September 1999 on guidance for corporate governance in banks.

**Core Principles for Fiscal Policies and Monetary-Financial Policies.** Standards and guidelines for general macroeconomic policies fall outside the scope of this paper. These standards are potentially very important, however, and the issues about their design and future monitoring are similar to the issues discussed here. These other standards are thus glancingly identified as part of this summary overview.

A Code of Good Practices on Fiscal Transparency--Declaration on Principles was adopted by the IMF's Interim Committee at its April 1998 meeting. A supporting IMF document, the Manual on Fiscal Transparency, provides guidelines on implementation of the standards.

A corresponding set of principles for monetary and financial policies was under development at the IMF during 1999 (prepared in collaboration with the BIS and national

<sup>41</sup> BIS, CGFS (1999a, 1999b).

<sup>42</sup> Explanatory discussion and the full text of the OECD Principles of Corporate Governance are available at the OECD web site (www.oecd.org/daf/governance.)

<sup>43</sup> Information about the World Bank's activities in corporate governance is available at a World Bank web site: www.worldbank.org/html/fpd/privatesector/cg/index.htm.

central banks and supervisory authorities). The resulting draft, a *Code of Good Practices on Transparency in Monetary and Financial Policies: Declaration of Principles*, was adopted by the Interim Committee at its meeting in September 1999. The IMF staff is now drafting a supporting Manual to guide national authorities in implementing the principles.<sup>44</sup>

These two initiatives for international standards are labeled as "codes." In practice, the two codes are essentially core principles rather than detailed prescriptions in the sense in which I contrasted core principles with detailed codes above. The fiscal *Manual*, however, does become more detailed in its guidance about implementation. It will be interesting to observe how detailed the monetary-financial Manual will be when completed and whether detailed Manuals will be perceived as helpful and acceptable to national governments.

#### **Allocation of Responsibilities Among International Institutions**

In the remainder of the paper, I identify several salient issues in this area of standards and prudential oversight that remain unresolved.

Within individual nations, as discussed earlier, it is controversial whether to have prudential oversight for financial activities concentrated at a single government institution or dispersed across multiple government agencies. The analogous question for the world as a whole is whether to lodge supranational oversight in a single international institution or in several such institutions, and in particular which institution(s).

The Joint Forum on Financial Conglomerates can probably satisfy some of the more straightforward coordination needs among the BCBS, IOSCO, and IAIS. It is too early to judge whether the Joint Forum can be sufficiently effective in tackling the most difficult coordination issues where the supervision of banks, securities firms, and insurance companies overlaps. Similarly, the Financial Stability Forum may be able to address the easier of the broader coordination issues where still more international financial institutions are involved. The BIS Committee on the Global Financial System can continue to play a helpful coordinating role among central banks. The most difficult, and the most important, issues about the allocation of responsibilities among the international financial institutions, however, remain to be faced.

In recent intergovernmental discussions and papers, a distinction has emerged between an international institution's "core" areas and those areas which for that institution are "noncore." The IMF in particular has begun to use this terminology. The IMF describes its core areas as those "central to its [the IMF's] direct operational focus" and delimits these as "data dissemination, transparency in fiscal policy, monetary and financial policy transparency, and banking supervision." Non-core areas are described as "areas which, although critical for the effective operation of economic and financial systems, lie outside the Fund's direct operational focus." Examples for the non-core areas of the IMF are given as securities and insurance regulation, corporate governance, and accounting and auditing.<sup>45</sup>

<sup>&</sup>lt;sup>44</sup> The texts of the fiscal and monetary-financial principles, and background information, can be found in the standards and codes section of the IMF web site (www.imf.org/external/standards/index.htm).

<sup>&</sup>lt;sup>45</sup> IMF, *International Standards and Fund Surveillance -- Progress and Issues* (August 1999, particularly para. 3, 13-20, 57-70).

The presumption at the IMF appears to be that the World Bank, and other international financial institutions as well, should delimit their own respective domains of core responsibilities. The distinction between core and non-core areas, however, is far from clearcut for the IMF or any other of the international organizations. The mandates and functional responsibilities of the institutions are not always well differentiated and, in any case, are partly overlapping in certain key functional areas.

The difficulties are well illustrated by the area of bank supervision and regulation. The IMF, as just noted, assigns banking supervision to itself as a core IMF area. The major initiatives in international cooperation in banking supervision, however, have taken place through the BIS, particularly the BCBS. The IMF and World Bank have become more closely involved in the last decade and a half. But certainly on the basis of past history, and even judging by the current intensity of activity, the area of banking supervision is more a core area for the BIS than the IMF. Collection and dissemination of aggregated financial data on a regional and world scale is another vital area where both the IMF and the BIS have major and partly overlapping responsibility.

In recent decades, the BIS has been quintessentially an institution run primarily for, and controlled by, the world's major central banks. The BIS serves as the primary locus of their consultation and cooperation. The central banks perceive the BCBS as the forum through which their representatives discuss prudential oversight for banks.<sup>46</sup> Within some individual nations, as discussed earlier, it has always been true that one or more non-central-bank institutions have been closely involved in bank supervision.<sup>47</sup> Several nations, including the United Kingdom and Japan, have recently separated a major part of the prudential oversight for those nations with multiple government agencies, the BCBS has served as the primary forum for consultations and cooperation.

Beginning with the IMF's 1982-86 lending to nations caught up in debt-servicing crises, the IMF staff began to be pulled into international discussions about bank supervision. This involvement intensified after the Tequila crisis of 1995 and the Asian crises of 1997-98. For example, bank and finance-company restructuring was a dominant feature of the IMF's crisis stabilization packages for Thailand, Korea, and Indonesia.

In the longer-run future, should the IMF increasingly assume a dominant role in the global aspects of standard setting, data dissemination, and prudential oversight for banking,

<sup>47</sup> For example, banking supervision in the United States is shared among the Federal Reserve, the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and numerous state authorities. Germany for a long time has had a bank supervisory agency institutionally separate from the Bundesbank.

<sup>&</sup>lt;sup>46</sup> At its inception, the BCBS involved only the G-10 nations. Subsequently, the Committee reached out to non-G-10 nations. The BCBS first invited supervisory authorities from offshore financial centers and some other developing nations to a meeting in 1979. Further meetings and consultations occurred periodically in the 1980s, with still more intensive and systematic inclusion of non-G-10 nations in the 1990s. Notwithstanding the outreach, the BCBS is still dominated by the central banks of the G-7 and a few other European nations.
with the BIS playing just a supporting role? This touchy question cannot be addressed as merely a standards and oversight issue. The respective future roles of the IMF and BIS depend at least as much on the global aspects of general monetary and lender-of-last-resort policies, which in turn raise all the delicate issues of political independence for central banks. Today's central banks prize the BIS as their institution, and have not welcomed treasuries and finance ministries inserting themselves into BIS activities. The IMF, on the other hand, is often perceived as more beholden to treasuries and finance ministries in national governments than to national central banks. Which institution, the IMF or the BIS, is the nascent core of a central financial institution for collective global governance -- an eventual global central bank for national central banks, even over a very long run a world central bank with its own instruments of global monetary policy? If one presumes that the IMF is that nascent core, will the IMF have to become more politically independent of national governments? Alternatively, is it imaginable that the IMF and the BIS will both eventually survive as powerful global financial institutions and, if so, how will functions be divided or shared among them?

For the shorter run, the FSF will serve as the main institutional mechanism for keeping both institutions cooperating. The mandate of the FSF is, among other things, "to give impetus to work on issues that cut across the mandates and expertise of Forum members" and "to coordinate work among Forum members, drawing on their comparative advantages." Eventually, however, the world community -- and in particular the central banks of the major nations -- will have to decide what roles they wish the BIS to play. Presumably a day will eventually come when, *de facto* if not openly and transparently, difficult decisions about the allocations of functions between the BIS and the IMF will need to be made.

The longer-run allocation of functions between the IMF and the World Bank is also difficult and tendentious. Some superficial commentary has noted that the Bank has gradually assumed functions traditionally associated just with the Fund and the Fund has gradually been pulled into functions traditionally associated just with the Bank, and has then suggested that the two be merged into a single institution. The appropriate overall division of labor between the IMF and the World Bank is an important question, but not one that can be discussed in this paper. I mention it here because there exists a need for better coordination between the IMF and the World Bank even on issues of prudential oversight for banking and because some observers believe that the IMF should not become deeply involved in prudential oversight.<sup>48</sup>

<sup>&</sup>lt;sup>48</sup> "More effective collaboration" on prudential oversight issues between the IMF and the World Bank is reported to be taking place recently through a new Bank-Fund Financial Sector Liaison Committee (FSLC), which has launched a collaborative Financial Sector Assessment Program (FSAP). See *Report of the Managing Director on Progress in Strengthening the Architecture of the International Financial System*, IMF (1999, para. 20-24 and Box 3). For two sets of views that the IMF should more narrowly focus its activities, including general surveillance, on macroeconomic and exchange-regime issues rather than becoming deeply involved in microeconomic issues (such as banking supervision and standards monitoring), see the recent reports by an external evaluation team on IMF surveillance and by the Council on Foreign Relations Task Force on architectural reform --IMF, *External Evaluation of IMF Surveillance* (1999); Council on Foreign Relations (1999).

Monitoring and enforcement of global standards and prudential oversight will receive greater emphasis over time, as discussed above. In particular, the IMF's process of surveillance through Article IV consultations and surveillance of exchange regimes (not discussed in this paper) will assume greater salience. Some reformers want the IMF to be the dominant institution in surveillance of individual nations and the global system, and even recommend that the IMF itself prepare and publish comprehensive "transparency" reports known as RISCs (Reports on the Implementation of Standards and Codes) for individual nations.<sup>49</sup> This evolution is bound to result in heightened tension about the allocation of responsibilities among the international financial institutions because the IMF will then inevitably make specific judgments about the implementation of standards in areas where other international institutions have the primary, or at least equal, responsibility. If the IMF prepares surveillance assessments of the whole range of global standards, could these assessments be accepted as the product of the international collective-governance community broadly defined, or might they be viewed merely as the judgment of the IMF itself? A genuine dilemma exists here, which could become sharper over time.

Where over the longer run does the OECD fit into the collection of international economic and financial institutions? Among the largest international organizations, the OECD's mandate and functional responsibilities are least clearly defined. The longer-run future of the OECD is another touchy issue not openly faced for the time being.

Achieving a clearer allocation of responsibilities among the existing international financial institutions will be difficult. But those difficulties are probably surmountable over a medium or long run. Sweeping institutionalist reform -- for example, completely re-designing the existing institutions, or even more so setting up entirely new overarching institutions -- is impossible, at the least over a shorter run and probably even further into the future. Henry Kaufman (1998) has suggested a new overarching international institution for prudential oversight, a single super-regulator with responsibilities over a comprehensive range of financial institutions and financial markets. George Soros (1998) has suggested a new international debt insurance agency. I agree with Barry Eichengreen's judgment (1999) that sweeping reform ideas such as these are politically infeasible. Initiatives like the Financial Stability Forum are the most that can be envisaged for the short run.

The most ambitious of the ideas for international cooperation for insolvency and bankruptcy are also non-starters.<sup>50</sup> A world bankruptcy court endowed with genuine political muscle seems an appealing idea in principle, but its political, legal, and administrative aspects would be extremely difficult to implement. For the foreseeable future, national governments and judiciaries seem unlikely to formally yield that degree of authority to a supranational institution.

## **Some Further Controversial Issues**

The areas of standards and prudential oversight usually have low visibility in public

<sup>&</sup>lt;sup>49</sup> IMF, International Standards and Fund Surveillance (August 1999).

<sup>&</sup>lt;sup>50</sup> Proponents of these sweeping institutional reforms include Raffer (1990), Miller-Zhang (1997), and Radelet-Sachs (1998). Eichengreen (1999) discusses these ideas and argues against them on grounds of political infeasibility.

discussion and debate. Most parts of the public have little knowledge about them. Particular issues are not perceived as overridingly important, usually even by the experts. Though controversies among experts are as common as in any other areas of professional activity, the controversies seldom become heated enough to attract widespread attention outside the areas. In this section of the paper, I identify three such controversial issues. Although you will never read about these on the front page of your newspaper, their resolution may have significant implications for the global financial system.

Adoption by individual nations of international accounting standards. The various accounting and auditing standards of IASC and IFAC are not legally binding on nations' firms or financial institutions. Each nation's government and the nation's private associations will have to encourage their acceptance and use within the nation's borders. If significant disagreements exist among IASC members, however, implementation of world standards becomes highly problematic.

The tensions are well illustrated by the current situation in the United States. One might think that the United States would be taking the lead in encouraging adoption of the IASC core standards. But many Americans, probably including influential officials in the Securities and Exchange Commission and elsewhere in the U.S. Government, are dragging their feet instead of taking the lead.<sup>51</sup> The dilemma confronting thoughtful Americans stems from contentions that the proposed IASC world standards are weaker (less stringent) in some respects than the generally accepted accounting principles (GAAP) that prevail in the United States.<sup>52</sup> (However, it is also said that some of the proposed IASC standards, such as rules for mergers, are preferable to GAAP standards.) If American supervisors and accounting firms accept the IASC rules as a substitute for GAAP, the safety and soundness of the American financial system could be undermined to the extent that GAAP rules really are superior to IASC rules. If the United States refuses to adopt the IASC world standards, on the other hand, the largest and wealthiest economy in the world could impede a global initiative thought to be beneficial for all nations, including the United States itself.

The controversy over IASC standards has apparently spilled over into a tussle between North America and Europe over the governance structure of the IASC itself. European participants have been described as backing a blueprint for structural reform originating with IASC itself while the United States is characterized as leading a breakaway group sympathetic to GAAP rules.<sup>53</sup>

This example is a particular instance of a very general problem, in which the representatives of an individual nation may be under pressure to accept a proposed compromise consensus developed in international meetings when the proposed compromise generates gross costs for the individual nation. If the proposed international consensus generates costs that exceed benefits for the nation -- that is, fails to promise <u>net</u> benefits -- its representatives should presumably reject the compromise. If the compromise promises significant net benefits for the nation cannot

<sup>&</sup>lt;sup>51</sup> Canadians and the Canadian government may also be in this position.

<sup>&</sup>lt;sup>52</sup> See, for example, Ignatius (1999).

<sup>&</sup>lt;sup>53</sup> A newspaper story in the *Financial Times* of May 10, 1999 -- "Accountancy: Battle for World Control" -- developed this theme.

sensibly be paralyzed by the existence of some less broadly defined respects in which the nation will be disadvantaged.

For any international consensus to emerge in the first place, the largest, most influential nations typically have to exert leadership. The United States has at least as much interest as smaller nations in forging agreed minimum world standards for accounting and auditing. The nascent efforts of the IASC and IFAC, and the related International Forum on Accountancy Development, are important for the future stability of both the global and U.S. financial systems. Americans should try to improve the proposed IASC core standards in areas where they may be less stringent or less effective than GAAP rules. But Americans should also vigorously encourage the widespread adoption of the IASC international core standards and hence endorse the standards for the United States -- even if some of the standards can be still further improved. Reluctance to apply the IASC standards in the United States will surely have unfavorable repercussions on the postures of many developing nations as those nations decide how to respond to the pressure for raising accounting and auditing standards in their economies.<sup>54</sup>

**Collective-action clauses in bond contracts**. Numerous official statements about improving the international financial architecture have suggested that the prevention and resolution of financial crises could be modestly facilitated by introducing more orderly ways of restructuring problem debts. The modest steps suggested have included majority-voting, sharing, and collective-representation clauses into new bond contracts and clauses that would require a minimum percentage of bondholders to agree before legal action could be taken. The goal of such steps is to prevent a few creditors from instigating legal actions or other means of obstructing compromise restructurings when such restructurings are in the interests of the debtor and the great majority of creditors.<sup>55</sup>

These modest proposals turn out to be controversial, somewhat understandably from the perspective of private bondholders and prospective borrowers in emerging-market nations, but less understandably from the perspective of the G-7 nations' governments. The issues are not really a topic in prudential oversight or financial standards per se. But I raise them here because of their similarity to the accounting-standards issue just discussed.

The governments of the largest nations -- especially the G-7 "varsity team" -- are strong advocates of encouraging the governments of emerging-market nations to incorporate these changes into their debt contracts for new borrowing. Yet the G-7 governments, and most especially the U.S. Treasury, seem unwilling to introduce administrative or legislative changes that would permit the incorporation of such collective-action clauses in their own new borrowing instruments.

<sup>&</sup>lt;sup>54</sup> I do not have detailed enough information about the differences between IASC and GAAP rules to carry the discussion further. But I conjecture that scope may exist for the United States to strongly endorse the IASC proposals as <u>minimum</u> standards and then to continue to apply GAAP standards in those areas where it can be convincingly demonstrated that the GAAP standards are more stringent. The process of mutual recognition might then eventually force up the IASC standards to the more stringent GAAP level.

<sup>&</sup>lt;sup>55</sup> Eichengreen (1999, especially pp. 65-78) has a thoughtful evaluation of these proposals.

Despite asking on numerous occasions, I have not yet heard a persuasive explanation of why the United States and the other G-7 nations cannot show leadership in this area by changing their own contracts. The details in each major creditor nation's situation are different. The United States government borrows in its own currency. It may not be administratively straightforward in the United States to introduce such changes; perhaps the Congress might have to be consulted or asked to act. Some voices argue that the borrowing rate for the U.S. government might rise by a basis point or two if such changes were made, and no risk whatsoever of this sort should be allowed. Et cetera.

Yet just as in the case of the proposed IASC world accounting standards, emergingmarket or developing nations will watch more closely what the largest nations do than listen to what they say. Adverse-selection difficulties will inhibit, for example, Venezuela or South Africa or India from introducing such collective-action clauses into their bond contracts unless the G-7 nations set a good example and do so themselves.

Such modest changes in bond covenants might yield significant, albeit modest, gains for financial stability in the world as a whole. As the quarterback of the varsity first team, the U.S. Treasury should either put its money where its mouth is on this point, or else provide a clear explanation of why it believes that such changes to debt instruments would be adverse if adopted by the United States but would be beneficial if adopted by the JVs and the sandlot teams.

**The evolution of capital-adequacy requirements for banks.** The BCBS believes that the Basle Capital Accord has played a useful role in raising the capital and reducing the riskiness of internationally active banks. A working group of the BCBS submitted a report in April 1999 evaluating the impacts of the capital requirements on bank behavior (BIS, BCBS, 1999). The working group concluded that the introduction of formal minimum capital requirements in Group of Ten nations induced relatively weakly capitalized banks to maintain higher capital ratios than would otherwise have been held.

But the Working Group also acknowledged that large banks have learned how to exploit the limited relationship between actual risk and the regulatory minimum requirements for capital. These banks have been able to reduce their required capital by reshaping their balance sheets. The banks have often securitized a package of already arranged loans, removing those assets from the balance sheet and accordingly reducing their required capital. Some arrangements for securitization, however, entail the banks retaining some of the credit risk even after the assets are formally off their own balance sheets.

The Accord has been criticized on several other grounds as well, and the BCBS itself has acknowledged the criticisms as serious.<sup>56</sup> One widely recognized problem is that the classification of banks' assets into a limited number of categories for the purposes of the capital requirements is artificial and masks significant differences among assets within individual classes. For example, whether large or small, whether low-risk or high-risk, claims on corporate entities are lumped together, not distinguishing between their differing credit quality. Mortgage claims are, arbitrarily from the critics' perspective, given a lower risk weight (50 percent) than claims on corporate entities (100 percent). A further example: different risk weights are applied to claims on sovereigns (governments) depending on whether

<sup>&</sup>lt;sup>56</sup> Crockett (1997, pp. 28-29) and Calomiris-Litan (1999, pp. ) summarize the criticisms of the BIS-sponsored risk-weighted capital standards.

the claim is on the government of a member or a non-member of the OECD; claims on an OECD member government bear a risk weight of zero.

Most problematic of all in the current Accord, a bank's claims of all maturities on other banks incorporated within OECD nations and its short-term (up to 1 year) claims on banks in non-OECD nations are given a risk weight of only 20 percent -- in contrast to, for example, a risk weight of 100 percent on claims on non-OECD banks with a maturity of more than 1 year. The lower risk weighting is given to short-term interbank claims even when the claims are denominated in currencies other than the currency of the nation where the borrowing bank office is located. The outside critics of the Capital Accord and the BCBS itself both believe that the lower risk weighting associated with interbank lending was an unfortunate incentive that encouraged excessive interbank lending at short maturities to Asian and other emerging-market nations in the 1990s.

The original Capital Accord focused only on credit risk. Although the Accord was modified to take market risk into account in 1996, the current requirements still are not shaped by interest-rate risk.

The proposed new version of the Accord in the 1999 consultative paper is described as resting on three pillars: a revised version of the standardized rules for minimum capital requirements, proposals for supervisory review of institutions' capital adequacy and their internal assessment processes, and "effective use of market discipline."<sup>57</sup> The proposed revisions are addressed to the identified problems in the old Accord. For example, instead of the crude distinction between OECD and non-OECD countries, the new methodology would permit the risk weights applied to claims on sovereigns to be benchmarked to the assessments of those nations' governments by eligible external assessment institutions (e.g., credit rating agencies such as Moody's or Standard & Poor's). Interbank claims might be given risk weights based on the weighting applied to claims on the sovereign in which the bank is incorporated; a second option would use ratings assigned directly to banks by an external credit assessment institution. Most interbank claims would receive at least a 50 percent risk weighting, and claims on a bank could receive a risk weighting of less than 100 percent only if the banking supervisory authorities in that nation "has implemented, or has endorsed and is in the process of implementing, the 25 core principles [of the BCBS] for effective banking supervision."

The third pillar of the proposed revisions, more effective market discipline, is least well specified. Although the Committee rhetorically asserts that it wants to place more emphasis on market-based incentives and fuller disclosure, its consultative paper is short on concrete suggestions for doing so. The Committee indicates that it is conducting interviews on the possibilities and "proposes to develop more comprehensive guidance on public disclosure designed to strengthen the third pillar of the capital framework."<sup>58</sup>

Harsh critics of the Accord are not satisfied with the proposed revisions. Calomiris and Litan (1999), for example, believe that "the proposed changes, however well intentioned, either are insufficient or conceivably may worsen the preexisting problems." They believe the modified risk-weighting scheme would still fail to reflect the true risks to a bank from its

<sup>&</sup>lt;sup>57</sup> BIS, BCBS, A New Capital Adequacy Framework (1999).

<sup>&</sup>lt;sup>58</sup> Ibid., para. 11, 38-43, Annex 4.

overall portfolio of assets and off-balance-sheet instruments. They argue that it would be a mistake to place great reliance on the credit-rating agencies. Calomiris and Litan propose instead that the BCBS not merely allow (as at present) but <u>mandate</u> that large banks above a certain size threshold back a certain portion of their assets by long-term uninsured subordinated debt. The debt would be traded in a secondary market; the holders of a bank's debt would not be protected in the event of the bank's failure; movements in the market price of a bank's subordinated debt would serve both a signalling and disciplinary function. Thus a mandatory subordinated-debt requirement, they contend, would simplify the setting of capital requirements and facilitate the enforcement of the requirements through the use of market-based signals.<sup>59</sup>

The market-based, incentive-based features of the Calomiris-Litan proposal are promising, at least in principle. Administrative and political details would have to be worked out, country by country. But if the BCBS and national supervisory authorities were to incorporate some variant of this suggestion as part of their revisions of the Accord, they would have given strong substance to their "third pillar" of more effective market discipline. If the subordinated-debt feature proved successful, moreover, this dimension of the Accord could become relatively more important over time, with the Committee gradually raising the proportion of required capital to be held in the form of subordinated debt.

## Conclusion

This paper focuses on the evolution of international collective governance in the areas of standards and prudential oversight for financial activity. It provides analytical background, summarizes the nascent progress in international cooperation, and identifies several of the controversial issues that remain to be resolved.

Most of the wider public perceives this subject as unsexy, if indeed the subject has swum into their ken at all. But in reality the subject is very important. Much more than is commonly appreciated, the vigor and stability of financial and economic activity critically depends on sound standards and effective prudential oversight. I hope the overview in this paper is a useful reminder of why standards and oversight are an essential part of the foundation for a healthy economy and financial system.

Though I have emphasized the importance of standards and prudential oversight, I do not want to leave the misleading impression that they are somehow magic bullets that can slay all financial difficulties. Even if international cooperation leads to sizable further improvements in standards and oversight, which I hope it will, financial problems will still abound.

The financial system -- within individual nations, and not least the conglomeration of all national financial systems -- is inherently fragile, inherently vulnerable to instability. No nirvana exists, not even in theory, in which financial activity can be risk-free and problemfree. Quite the contrary. Deep-seated, innate features of financial activity expose financial activity to episodes of stormy weather, even to an occasional hurricane-level crisis. This potential for instability in the global financial system cannot be attributed exclusively to crossborder features of financial activity. The causes are deeply rooted in informational

<sup>&</sup>lt;sup>59</sup> For details of the subordinated-debt proposal and the supporting argument, see Calomiris and Litan (1999, pp. 28-34 in draft) and Calomiris (1997).

asymmetries, expectational and informational cascades, and adverse-selection and moralhazard problems that pervade all aspects of financial behavior, domestic as well as crossborder. But there is no question that the cross-border features magnify and aggravate the potential instability.

A balanced view of standards and prudential oversight should appreciate their fundamental importance, yet should not allow them to get out of perspective. Several other dimensions of the evolution of international collective governance, not discussed in this paper, are equally important. In short, sound standards and effective prudential oversight in an integrating world financial system are necessary -- but not sufficient -- conditions for healthy and reasonably stable financial activity.

Substantial and valuable progress has been made in recent years in international cooperation to strengthen standards and oversight. That observation is probably the main conclusion to take away from this paper. But another observation is a complement to that conclusion: if the governments of the largest nations had been still more farsighted, progress could have been still more substantial.

Prior to the mid-1990s, consultations among the major governments about international financial reforms ("architecture" was not yet the catchword) proceeded sluggishly. The Tequila crisis of 1995 caught the governments' attention and brought more focus on financial-stability issues. But then concern and cooperation subsided somewhat in 1996 and the first half of 1997. The Asian financial crises and the credit-spread turbulence that followed the Russian devaluation in 1998 created a sense of urgency and galvanized much of the recent progress.

With the world economy looking more robust in the fall of 1999 and the world financial system showing fewer manifestations of fragility, there may be some risk of the major governments slowing the pace once again. That would be unfortunate if it were to occur. Pragmatic incrementalism is the preferred approach to international architectural reform. But the increments should keep accumulating, even without the stimulus of further turbulence. Preferably, major governments should move forward at a brisk pace rather than on tiptoe.

## REFERENCES

- Avery, Christopher, and Peter Zemsky. 1998. "Multidimensional Uncertainty and Herd Behavior in Financial Markets." *American Economic Review*, 88 (September 1998), 724-48.
- Banerjee, Abhijit. 1992. "A Simple Model of Herd Behavior." *Quarterly Journal of Economics*, 107 (1992), 797-817.
- Bank for International Settlements, Basle Committee on Banking Supervision. 1997. *Core Principles for Effective Banking Supervision*. Basle, Switzerland: Bank for International Settlements, September 1997.
- Bank for International Settlements, Basle Committee on Banking Supervision. 1997. International Convergence of Capital Measurement and Capital Standards ("Basle Capital Accord," July 1988, updated to April 1997). Basle, Switzerland: Bank for International Settlements, 1997.

- Bank for International Settlements, Basle Committee on Banking Supervision. 1999. A New Capital Adequacy Framework: Consultative Paper. Basle, Switzerland: Bank for International Settlements, 1999.
- Bank for International Settlements, Basle Committee on Banking Supervision. 1999. *Capital Requirements and Bank Behavior: The Impact of the Basle Accord.* Report prepared by a working group led by Patricia Jackson. BCBS Working Papers No. 1. Basle, Switzerland: Bank for International Settlements, April 1999.
- Bank for International Settlements, Committee on the Global Financial System. 1999. *Market Liquidity: Research Results and Selected Policy Implications*. Report of a Working Group chaired by Masaaki Shirakawa. Basel, Switzerland: Bank for International Settlements, May 1999.
- Bank for International Settlements, Committee on the Global Financial System. 1999. *A Review of Financial Market Events in Autumn 1998*. Report of a Working Group chaired by Karen Johnson. Basel, Switzerland: Bank for International Settlements, October 1999.
- Benston, George J., and George G. Kaufman. 1997. "FDICIA After Five Years." Journal of Economic Perspectives, 11 (Summer 1997), [pp. ??-??].
- Bernard, Henri, and Joseph Bisignano. 1999. "Information, Liquidity and Risk in the International Interbank Market: Implicit Guarantees and Private Credit Market Failure." Draft manuscript. Bank for International Settlements, Monetary and Economic Department, September 1999.
- Bikhchandani, Sushil, David Hirshleifer, and Ivo Welch. 1992. "A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades." *Journal of Political Economy*, 100 (October 1992), 992-1026.
- Bordo, Michael D., Barry Eichengreen, and Douglas A. Irwin. 1999. "Is Globalization Today Really Different than Globalization a Hundred Years Ago?" Paper prepared for the Brookings Policy Trade Forum, Washington DC, April 15-16, 1999. [Washington, DC: Brookings Institution, 1999.]
- Bryant, Ralph C. 2000. *Turbulent Waters: Cross-Border Finance in the 21st Century*. Washington, DC: Brookings Institution, forthcoming 2000.
- Cairns, David. 1998. "IASC -- 25 Years of Evolution, Teamwork, and Improvement." Insight (Quarterly newsletter of the International Accounting Standards Committee). June 1998.
- Calomiris, Charles W., and Robert E. Litan. 1999. "Prudential Financial Regulation in a Global Marketplace." In Robert E. Litan and Anthony M. Santomero, eds., *Brookings-Wharton Papers on Financial Services.* Washington, DC: Brookings Institution, forthcoming 2000, pp. xx-xx.
- Calomiris, Charles W. 1997. The Postmodern Bank Safety Net: Lessons from Developed and Developing Economies. Washington, DC: AEI Press, 1997.
- Clark, Robert Charles. 1976. "The Soundness of Financial Intermediaries." *The Yale Law Journal*, Vol. 86, No. 1 (November 1976), 3-102.

- Council on Foreign Relations Independent Task Force; Carla A. Hills and Peter G. Peterson, Co-Chairs; Morris Goldstein, Project Director. 1999. *Safeguarding Prosperity in a Global Financial System: The Future International Financial Architecture.* Washington, DC: Institute for International Economics for the Council on Foreign Relations, September 1999.
- Crockett, Andrew. 1997. "The Theory and Practice of Financial Stability," *Essays in International Finance* No.203, International Finance Section, Department of Economics, Princeton University, April 1997.
- Dahl, Drew, and Michael F. Spivey. 1995. "Prompt Corrective Action and Bank Efforts to Recover from Undercapitalization." *Journal of Banking and Finance*, 19 (1995), 225-43.
- Diamond, Douglas W., and Philip H. Dybvig. 1983. "Bank Runs, Deposit Insurance, and Liquidity." *Journal of Political Economy*, Vol. 91, No. 3 (June 1983). pp. 401-19.
- Edwards, Franklin R. 1999. "Hedge Funds and the Collapse of Long Term Capital Management." *Journal of Economic Perspectives*, 13 (Spring 1999), 189-210.
- Eichengreen, Barry. 1999. Toward a New International Financial Architecture: A Practical Post-Asia Agenda. Washington, DC: Institute for International Economics, forthcoming 1999.
- Friedman, Thomas L. 1999. *The Lexus and the Olive Tree*. New York: Farrar, Straus & Giroux, 1999.
- Garcia, Gillian. 1995. "Implementing FDICIA's Mandatory Closure Rule." Journal of Banking and Finance, 19 (1995), 723-32.
- Gold, Joseph. 1984. Legal and Institutional Aspects of the International Monetary System: Selected Essays. Two volumes. Washington, DC: International Monetary Fund, 1984.
- Gold, Joseph. 1990. Legal Effects of Fluctuating Exchange Rates. Washington, DC: International Monetary Fund, 1990.
- Goodhart, Charles A.E., and Dirk Schoenmaker. 1993. "Institutional Separation between Supervisory and Monetary Agencies." in F. Bruni, ed., *Prudential Regulation,* Supervision and Monetary Policy. Centro di Economia Monetaria e Finanziaria "Paolo Baffi." Universita Commerciale Luigi Bocconi, 1993. Reprinted as chapter 16 in Goodhart, The Central Bank and the Financial System, Cambridge, MA: MIT Press, 1995.
- Goodhart, Charles A.E., and Dirk Schoenmaker. 1995. "Should the Functions of Monetary Policy and Bank Supervision Be Separated?" Oxford Economic Papers, 47 (1995), 539-60.
- Gray, John. 1999. False Dawn: The Delusions of Global Capitalism. New York: The New York Press, 1999.
- Greider, William. 1997. One World, Ready or Not: The Manic Logic of Global Capitalism. New York: Simon & Schuster, 1997.
- Group of Thirty. 1998. International Insolvencies in the Financial Sector: A Study Group Report. Washington, DC: Group of Thirty, 1998.

- Group of Twenty Two (Willard Group). 1998. *Report of the Working Group on Strengthening Financial Systems*. Released in Washington, DC, October 1998. (Available on internet web sites for IMF, BIS, and U.S. Treasury.)
- Group of Twenty Two (Willard Group). 1998. Report of the Working Group on Transparency and Accountability. Released in Washington, DC, October 1998. (Available on internet web sites for IMF, BIS, and U.S. Treasury.)
- Helliwell, John F. 1998. *How Much Do National Borders Matter?* (Integrating National Economies series.) Washington, DC: Brookings Institution, 1998.
- Ignatius, David. 1999. "Crunching the Numbers the American Way." Op-ed column in *Washington Post*, March 31, 1999.
- International Accounting Standards Committee (IASC). 1999. "IASC Publishes a Comprehensive Standard on Financial Instruments, 5 March 1999." News release, available at web site of IASC: www.IASC.org.uk/news.
- International Monetary Fund. 1999. *External Evaluation of IMF Surveillance*. Report of a Group of Independent Experts (Chairman, John Crow). Washington, DC: International Monetary Fund, September 1999.
- International Monetary Fund. 1999. International Standards and Fund Surveillance --Progress and Issues. Prepared by IMF Staff. Washington, DC: International Monetary Fund, August 16, 1999.
- Monetary Fund, August 16, 1999. International Monetary Fund. 1999. Report of the Managing Director on Progress in Strengthening the Architecture of the International Monetary System. Washington, DC: International Monetary Fund, April 1999.
- International Monetary Fund. 1999. Report of the Managing Director to the Interim Committee on Progress in Strengthening the Architecture of the International Financial System. Washington, DC: International Monetary Fund, September 24, 1999.
- Jackson, John H. 1998. "Global Economics and International Economic Law." *Journal of International Economic Law*, 1 (March 1998).
- Kaufman, Henry. 1998. "Preventing the Next Global Financial Crisis." *Washington Post*, January 28, 1998, p. A17.
- King, Mervyn. 1999. "Reforming the International Financial System: The Middle Way." Speech delivered at Federal Reserve Bank of New York, 9 September 1999.
- Masson, Paul R. 1998. "Contagion: Monsoonal Effects, Spillovers, and Jumps Between Multiple Equilibria." IMF Working Paper WP/98/142. Washington, DC: International Monetary Fund, September 1998.
- Masson, Paul R. 1999. "Contagion: Macroeconomic Models with Multiple Equilibria." Journal of International Money and Finance, 18 (1999), 587-602.
- Masson, Paul R. 1999. "Multiple Equilibria, Contagion, and the Asian Crisis." Paper prepared for January 1999 meeting of the Society for Financial Economics. Washington, DC: International Monetary Fund, January 1999.
- Miller, Marcus H. and Lei Zhang. 1997. "A 'Bankruptcy' Procedure for Sovereign States." ESRC Global Economic Institutions Working Paper No. 34. London: Economic and Social Research Council, 1997.

- Ostry, Sylvia. 1999. "Future of the WTO." Paper presented at the Brookings Trade Policy Forum, Washington DC, April 15-16, 1999.
- Petersmann, Ernst-Ulrich. 1998. "From the Hobbesian International Law of Coexistence to Modern Integration Law: The WTO Dispute Settlement System." *Journal of International Economic Law*, 1 (June 1998).
- Raffer, Kunibert. 1990. "Applying Chapter 9 Insolvency to International Debts: An Economically Efficient Solution with a Human Face." *World Development*, 18 (1990), pp. 301-11.
- Rodrik, Dani. 1999. "Governing the Global Economy: Does One Architectural Style Fit All?" Paper presented at the Brookings Trade Policy Forum, April 15-16, 1999, Washington, DC.
- Soros, George. 1998. The Crisis of Global Capitalism: Open Soceity Endangered. New York: BBS Public Affairs, 1998.
- Stiglitz, Joseph E. 1994. "The Role of the State in Financial Markets." in Michael Bruno and Boris Pleskovic, eds., *Proceedings of the Annual World Bank Conference on Development Economics 1993.* Washington, DC: World Bank, 1994.
- Tietmeyer, Hans. 1999. "International Cooperation and Coordination in the Area of Financial Market Supervision and Surveillance." Frankfurt: Deutsche Bundesbank, February 1999. [Available from the web site of Financial Stability Forum, www.fsforum.org].