Banking Supervision and Financial Stability

Andrew Crockett

Group of Thirty, Washington, DC

The William Taylor Memorial Lectures 4

This is the fourth lecture in the series dedicated to the memory of William Taylor (1933–1992). William Taylor's career in Washington DC included 15 years at the Board of Governors of the Federal Reserve, where he rose to the position of Staff Director of Banking Supervision and Regulation, and culminated in his appointment as Chairman of the Federal Deposit Insurance Corporation in 1991. The lecture series is intended to honor his long career of distinguished public service and to recognize his dedication to ensuring the strength and stability of the financial system.

The lecture was delivered on the occasion of the 10th International Conference of Banking Supervisors in Sydney, Australia, on October 22, 1998.

About the Author

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No. 4

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Published by
Group of Thirty©
Washington, DC
1998

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I. Introduction

It is a great honour to be invited to give the William Taylor Memorial lecture before this distinguished audience of bank supervisors. I did not have the good fortune to know Bill Taylor personally. Those who did speak of a man who represented all that is best in his profession, and his country. They remember his outstanding professional competence as a supervisor, his dedication to public service, and his concern for others. He contributed greatly to raising the standards of bank supervision in the United States, and at this time of difficult challenges in the international financial system, his advice and guidance is sorely missed.

The world economy is experiencing its most severe financial crisis of the post-war era. In country after country macro-economic setbacks have interacted with weaknesses in the financial sector to bring previously strong economic expansion to a halt. Even in those countries that have escaped a full-scale financial crisis, market turbulence has placed strains on financial intermediaries and resulted in serious volatility in asset prices. Not surprisingly, political leaders are calling for a "new financial architecture" that would avoid such crises, or at least lessen their severity.

Yet, the picture is not all gloomy, nor do we have to start from scratch in designing a new architecture. Many countries have made considerable strides in reinforcing their banking systems, thanks in large part to the efforts of supervisors acting nationally and regionally, as well as internationally through the Basle Committee. Recent initiatives, such as the promulgation of the Core Principles for Effective Banking Supervision, point the way to a stronger financial system in the future, and the new focus on financial stability at the highest political levels offers the prospect of greater support for the supervisory community in the years to come.

Of course, improved bank supervision is only one aspect of the strengthening of financial systems. If the current crisis has taught us anything, it is that in an integrated world financial system, the stability of markets and financial intermediaries, wherever they are located, are increasingly interdependent. To strengthen the system, therefore, action is needed on a number of fronts, and the measures that are taken need to be mutually consistent and reinforcing.

They also need to be sensitive to political demands for transparency and accountability. This will require a delicate balance: those responsible for financial stability will have to accept greater political interest in their activities, while resisting pressures to influence their judgement in the day-to-day discharge of their duties.

The central theme of this lecture will be the need to adapt the mechanisms for promoting financial stability to a world in which financial markets have become more open and global. Gone are the days when administrative controls restricted the activities of financial intermediaries, when national capital markets were largely insulated from capital flows, and when governments could intervene to counteract undesired market developments. Unless we want to turn back the clock, which may not be possible given the irreversibility of technological advances, stability can only be effectively underpinned by strengthening the internal discipline of markets. The task of supervisors, and others concerned with systemic stability, is to find ways of working with, rather than against, the grain of market forces in encouraging prudent behaviour by financial intermediaries and other market participants.

I will begin by briefly recalling some of the major changes that have affected the financial system in recent years. This review will illustrate how the influence of market forces in the allocation of resources has grown. It will also help explain the increased vulnerability of financial systems, and the complex relationship between the stability of banks, the stability of markets in general, and the performance of the real economy.

Against this background, I will then group what I have to say around three main themes: the need for a comprehensive approach to financial stability; the role of capital in a market economy; and the changing focus of financial supervision. My perspective will be that of monetary and financial stability broadly defined, and I will try to set the key role of supervision in this broader picture. I will also say something about how the quest for a more stable financial system relates to the concept of a new "architecture" for international monetary arrangements.

II. The Changing Structure of the Financial System

In the past two decades or so, the structure of financial systems in many countries has been transformed by a number of interacting forces. Perhaps the most fundamental have been those of innovation and liberalisation, both driven by the engine of technological progress.

Innovation, in itself, is good. It helps existing processes to be performed more quickly and cheaply, and it allows the development of new products to meet new needs, but it can also complicate the task of maintaining stability. Some innovations, like the development of offshore markets, are designed to get around pre-existing controls. Others, like the growth of high-yield or "junk" bond markets, provide market access to new participants, but at the cost of raising levels of risk.

Still other innovations improve efficiency, but enhance the potential for disruption when accidents occur. In this sense, they may be compared to the development of faster forms of transport: they can get you to your destination more quickly, but to be safe they require accompanying developments in braking systems, road design, traffic regulations, and driver education. An example in the field of finance is the development of complex derivative instruments. When properly used, these can be a powerful means of controlling risk that allow firms to economise on scarce capital. However, it is possible for new instruments to be based on models which are poorly designed or understood, or for the instruments to give rise to a high degree of common behaviour in traded markets. The result can be large losses to individual firms or increased market volatility.

Along with innovation has come **liberalisation**. Innovation would have made many controls hard to maintain in any event, but the ascendancy of the free market philosophy has added political force to the drive to reduce administrative controls. There are now practically no barriers to cross-border capital movements in the advanced industrial nations. Financial institutions are free to operate virtually anywhere in the industrial world and in more or less whichever market segment they choose. Administrative restrictions on interest rates and other market prices have been increasingly abandoned, and unregulated intermediaries have access to markets that were once tightly controlled.

A consequence both of innovation and an increasingly widespread climate of financial liberalisation has been the **globalisation** of finance. Globalisation has brought benefits but also heightened risks. The volume of cross-border financial flows has increased enormously as a result of reductions in costs and the removal of controls. Users of financial services are, in normal times, the beneficiaries of this. However, if capital inflows are not based on sound fundamentals, they can initially postpone needed economic adjustments, and subsequently precipitate a crisis when they dry up or are reversed. Moreover, the interdependencies that are a consequence of globalisation carry the potential for increased contagion.

Another trend that is having profound effects on financial structure is **securitisation**. Securitisation is moving financial intermediation away from institutions such as banks and into capital markets, on which firms are growing increasingly dependent for their financing needs. This has at least two implications for those concerned with financial stability. The first is that market stability is becoming just as important as the stability of financial intermediaries for the effective performance of the real economy. The second is that developments in financial markets have a greater potential for propagating instability to the financial institutions that deal actively in them.

Lastly, **de-specialisation** and **market integration** are blurring traditional boundaries among different types of financial intermediaries. In the past, banks could be relatively easily recognised as institutions delivering a defined set of products and services to their customers. Nowadays, different categories of financial institutions compete with each other under different regulatory regimes, or sometimes without any regulation at all. The net result is that traditional regulatory arrangements, with supervisory responsibilities divided by national jurisdiction and market segment, are increasingly challenged by new market structures.

All these trends I have been describing have improved the capacity of financial systems to provide cost-efficient services to their users, but are complicating the task of regulators and supervisors in ensuring systemic stability by rendering obsolete traditional forms of regulation. They are therefore creating an environment in which supervisors have to seek "incentive compatible" regulation; that is to say, forms of regulation that harness profit-seeking objectives and internal market disciplines to support prudent behaviour. At the same time, we must recognise that markets are not perfect: information may be inadequate, safety nets may distort behaviour, and bubbles may arise. Those responsible for broader systemic stability must pursue the causes of these potential market failures and try to correct them, and both groups of authorities have to work together to ensure the compatibility of their approaches.

III. The Need for a Comprehensive Approach to Financial Stability

It should be apparent from what I have just been saying that it is not really possible to compartmentalise the responsibility for financial system stability. With liberalisation and the integration of markets, conditions in one part of the financial system are intricately related to those elsewhere. Thus, it is a fallacy to think that we can have sound financial institutions if the markets in which they operate, or the infrastructures that tie them together, are unstable. It is equally mistaken to think that markets will operate efficiently without a stable macro-economic environment. Moreover, the conditions for stability in each of these areas—institutions, markets and the macro-economy—have important interdependencies.

The crisis in the East Asian economies is a good illustration of this point. A currency crisis exposed weaknesses in the banking system, which in turn, caused a reversal of capital flows, thus exacerbating the currency crisis. Both contributed to a deterioration in economic prospects, further aggravating the original source of the problem, and contagion ensured that difficulties spread to other economies in the region and elsewhere.

If the causes of the crisis were multi-faceted, so are the solutions. The basic requirement is a strengthening of financial systems. This is not just a matter of stronger banking supervision, vital though that is, but also one of reinforcing the disciplines of the market. There has to be stronger corporate governance, the development of a true arms-length "credit culture", the establishment of robust bankruptcy legislation, more resilient financial structures in the company sector, strengthened accounting practices, and so on.

This is a demanding agenda. How can it be pursued? The key, in my view, is to recognise that we are dealing with a series of rather deep-seated market failures. The goal, therefore, is to restore the conditions in which markets can function more effectively and impart a stabilising rather than a destabilising influence on the broader economy. There are three central requirements: transparency, norms or standards of conduct, and appropriate incentives. The various techniques by which stability is pursued, including supervisory techniques, need to reinforce these elements.

Let me begin with **transparency**. Markets only operate efficiently on the basis of adequate information. There is growing agreement that all participants in financial markets, including the authorities, will have to be more transparent, but more information is not the end of the story. The information needs to be accurate, timely and useful.

In the area of financial data, the accounting principles that underlie them must meet recognised standards. In the past, too many institutions have failed only a short time after reporting a sound financial position. The reason, of course, is that accounting practices have allowed them to call bad loans good and to keep impaired assets on the books long after their value has been placed in question. The Basle Committee's recent report on best loan valuation, loss provisioning and credit risk disclosure practices, as well as the World Bank's call on major auditing firms not to approve financial statements prepared under accounting practices that fall below international norms, are both most welcome in this regard.

More information must also be provided to the market to enable it to play its disciplining role. This includes not only information about the condition of individual institutions, both banks and non-banks, but about the strength of financial systems and macro-economic developments more generally.

Norms or **standards of conduct** are needed to ratify best practice and to provide market participants with a benchmark against which to judge financial structures and the creditworthiness of those with whom they deal. Such norms should cover a number of topics, in addition to the areas of accounting, transparency and bankruptcy legislation, to which I have just referred. Other potential subject areas include corporate governance, risk management practices, the scale and structure of foreign currency borrowing and the design and operation of safety nets.

Transparency and standards of conduct are only helpful if there are **appropriate incentives** to ensure that market participants make use of them. A first requirement in this regard is to ensure that adverse outcomes incurred as a result of ignoring available information result in losses. Protecting market participants against the consequences of their own bad judgement will only exacerbate moral hazard. Beyond that, supervisors can impose restrictions or penalties on those that do not follow best practice. They can and should encourage the institutions they supervise to demand best practice behaviour from their counterparties, and the international community should seek ways of drawing attention to national financial systems that incur an unacceptable level of risk.

If this is the broad approach to strengthening the “architecture” of the international financial system, how should it be pursued in practice? In my judgement, it does not call for a major transformation in the institutional structure, or new mechanisms for managing exchange rates, international liquidity and the adjustment process. What is required is to strengthen the stabilising properties of markets by using and co-ordinating the expertise that exists across the whole range of specialisations.

Banking supervisors know the particular vulnerabilities of banks. Accountants are best placed to propose accounting standards. Financial analysts know the information that is most useful for analysing creditworthiness. Central banks are equipped to assess the channels through which contagion can be transmitted. Each has one, albeit very important, part of the picture. Only by working together can they ensure that the power of markets to allocate resources efficiently is not overwhelmed by periodic bouts of instability.

A stronger and more stable market-based system will probably have to be based on standards of best practice, developed by groupings of national experts. In this respect, the activities of the Basle Committee point the way forward. The Core Principles for Effective Banking Supervision were drawn up by a representative group of national supervisors and constitute a codified version of best practice in the field of banking supervision. Their wider acceptance is driven by a combination of market forces and peer pressure. Similar initiatives are now being considered in the fields of insurance and securities supervision, and in the management of payment and settlement systems. This approach could well be extended to the other areas I mentioned where strengthened standards are needed.

Of course, the promulgation of standards such as those embodied in the Core Principles is only a first step. The standards are more a checklist than a blueprint. Much remains to be done to give them practical effect, to monitor their implementation, and to find ways to encourage improved practices. The same can be said for standards in other areas, which are generally less well advanced than banking supervision.

IV. The Role of Capital in a Market Economy

Whatever the other areas in which standards are developed, capital is bound to play a central role. Financial supervisors are accustomed to dealing with the issue of capital in the context of regulatory requirements for financial institutions. But in fact equity capital plays a central role in the stability of all economic activity. It was high debt-equity ratios that made the corporate sector vulnerable in many East Asian countries, and inadequate international reserves relative to short-term liabilities (which can be thought of as the authorities' debt-equity ratio) was an important contributory factor in the currency crises.

The availability of adequate equity capital is a basic requirement for stability in a market economy. Of course, capital is a particular requirement for banks, given their high degree of leverage, and risk-weighted capital adequacy requirements are one of the central pillars of the present regulatory regime for banks. The Capital Accord of 1988 has played a major role in strengthening banking systems. There can be no disputing that capital holding by banks should be appropriately related to the size and nature of the risks they run.

Nevertheless, it is hard to be satisfied with the record of recent years. Country after country has encountered major strains in its banking system; large-scale public bailouts have been required in many cases, and fragile financial systems have often acted as a constraint on economic recovery. To be sure, these problems have arisen more from the failure to observe capital rules than from inadequacies in their design, but in attempting to create a more robust financial system for the future, it is of the essence that capital rules reinforce prudent behaviour. The Basle Committee's decision to review the 1988 Accord is therefore a good opportunity to reflect on how these rules can be adapted to meet the circumstances of a changing financial environment. Allow me to offer a few thoughts on issues that need to be addressed as this review proceeds. I will start from first principles.

The essential role of equity capital in any economic activity, financial or non-financial, is to provide incentives for good governance and to serve as a cushion against unexpected adverse outcomes. Normally, we expect the interplay of self-interest and market discipline to determine the level of capital held by an enterprise. While those with too little disappear when misfortune strikes, those with too much expose themselves to the possibility of being taken over by others that can use scarce capital more efficiently.

This paradigm is a helpful conceptual starting point, but for several reasons, cannot be applied to banks without qualifications. Banks are different from other firms. For one thing the failure of a bank can impose greater external costs than a non-financial company. And for another, banks usually benefit from a publicly-provided safety net. Thus, the private and social benefits from capital holding are apt to diverge.

This presents three sets of issues that I would like to discuss briefly. The first concerns how much capital banks should be required to hold. The second concerns the relationship between the level of capital and the economic cycle. The third concerns the specific question of how to measure the risks against which capital is to be held.

To begin with the **first** issue, that of how much capital banks should hold, societies have long accepted that there are certain risks that banks cannot realistically absorb from their own resources. Chairman Greenspan discussed this matter at some length in his William Taylor memorial lecture two years ago. These are the kind of financial catastrophes that occur perhaps two or three times in a century and are often associated with major economic contractions. If banks were to protect themselves against these types of event, the amount of leverage they would be able to engage in would be very small, and hence their ability to contribute to economic growth would be limited.

So society has accepted that certain safety net mechanisms should be put in place to guard against such eventualities. These include depositor protection and lender-of-last-resort arrangements to prevent situations of illiquidity from triggering insolvencies, as well as other less explicit risk sharing schemes for extreme events threatening outright and widespread insolvency. The authorities' implicit commitment to preserve a reasonably stable macro-economic environment, while not strictly speaking part of the safety net, could also be considered something on which private economic agents rely in their financial decisions.

The trouble is that as soon as such arrangements are in place, the behaviour of private agents begins to change. Banks become willing to take more risks and depositors more willing to lend to risky banks, expecting that they will be rescued if things go wrong. To redress this imbalance, supervisors insist on banks holding a certain minimum level of capital, enough to ensure that the safety net is not activated in anything other than wholly exceptional circumstances.

So far, so good. But who should decide which risks should be internalised and which should be socialised, and who judges the type and likelihood of crises that would require invoking the safety net? The answers to these questions ultimately determine the level of capital that banks should be asked to hold. But they are questions that require a collective social judgement as well as specialised technical expertise. Governments need to be involved, because they are responsible for providing the budgetary resources that stand behind the safety net. Central banks have a role, even when they are not supervisors, because of the intimate links between monetary conditions and the health of the financial system. Finally, supervisors clearly must be included because they are best placed to judge what level of capital is needed to cover a given level of risk.

Nor should one overlook the international dimension. The recent crisis has amply demonstrated the capacity for financial stresses in one economy to spill over to others. There is therefore a collective international interest in determining the minimum level of resilience of national financial systems.

A **second** issue to be considered in reviewing capital adequacy regulation is the relationship between capital holding and the economic cycle. If, as I have argued, the central role of equity capital in a market economy is to act as a buffer against adverse surprises, it is natural that it should run down in bad times and be reconstituted in good. But this poses a particular difficulty for banks and, potentially, for the economies in which they play a central role. When the macro-economic climate worsens, more loans go bad and more provisions have to be made. This naturally reduces capital ratios and induces banks to be cautious about granting new loans. A decline in credit availability, in turn, can further weaken economic activity and thus provide an additional twist in the vicious circle. Unless capital holding is well above the minimum in good times, capital adequacy rules will constrain lending and may result in a credit crunch when a downturn occurs.

I mention this dilemma, not to suggest that there is any easy way out for supervisors, or indeed other economic policy-makers. What is needed is a way of allowing capital to act as a cushion rather than an absolute constraint. Part of the answer is to find ways of encouraging capital holding that is well above minimum levels in good times. This requires, at the very least, stronger incentives for participants to fully recognise risk, ex ante. One way of doing this is to insist on more forward-looking provisioning practices, such that capital is available to absorb unexpected as against just expected risks. A number of countries seem to have been able to achieve this, and it is currently standing them in good stead.

In exceptional circumstances, however, even this may not be enough to prevent capital ratios from acting as a constraint on intermediation when economic conditions deteriorate. Several approaches to this dilemma have been tried, and all have problems and risks. One is temporary forbearance in the application of capital ratios. Supervisors have rightly been suspicious of this approach, especially when imposed on them by political authority. Unless managed with extreme discipline, forbearance risks providing short-term relief at the cost of allowing underlying problems to worsen. Still, one should not ignore the logic that capital ratios will have to move with the cycle if they are not to exacerbate it.

Another approach involves the injection of public funds. This has been done in a number of countries, although usually to restore minimum capital levels in a crisis rather than to consciously stabilise the economic cycle. The injection of public funds can be a way of limiting the adverse consequences of eroding bank capital without incurring the moral hazard implications of forbearance, but governments are understandably reluctant to bear the budgetary costs involved. Even where they are, there are delicate governance issues to be resolved. It is important that the owners and managers of banks that get into difficulty pay the penalty for their mistakes, and that there is a credible strategy for eventual public sector disengagement.

Another way of dealing with potential banking sector difficulties is through a relaxation of monetary policy. The approach of the United States in the early 1990s and Japan today could be said to have elements of this. Monetary relaxation can be politically easier to bring about than the injection of public funds, but it has obvious negative implications for inflation control if maintained too long. Moreover, to the extent that monetary injections depreciate the exchange rate, such a policy tends to "export" the problem.

The **third** issue that needs to be considered in a review of capital adequacy regulation is the measurement of risk. Nobody disputes that the credit risk weightings of the existing capital accord can be challenged. Assets in the same risk class can have widely varying quality, and the degree of concentration or diversification of a portfolio, which is an important ingredient of risk, is not explicitly taken into account. Initially, this did not make too much difference, as supervisors did not want to interfere in individual lending decisions, preferring to focus on the general issue of increasing overall levels of capital. This has, without any doubt, served the global financial system well.

Over time, however, banks' portfolio allocation decisions have been influenced by the existence of regulatory capital requirements. The availability of new instruments has also played a role in this, as has the expansion of capital opportunities more generally. Banks with high risk / return appetites can now satisfy them while still showing relatively strong capital ratios. As a result, the level of regulatory capital is becoming less directly connected with the underlying riskiness of a bank's portfolio.

To counteract this trend, supervisors must therefore seek ways of making the calculation of regulatory capital correspond better with the level of risk it is intended to cover. In this way, banks' decisions to increase or reduce the risk of their portfolio would be matched by commensurate increases or reductions in the level of regulatory capital.

True risk is usually best assessed by those who have the greatest stake in its accurate measurement. In a well-run institution, this is likely to be the management of the firm concerned. Supervisors will have to find ways of tapping into and using this expertise, without sacrificing their independence of judgement and their ultimate responsibility for judging prudent conduct.

This does not mean that regulators have to accept whatever level of capital holding banks deem prudent. Far from it. It is entirely natural that the level of capital required by regulators to protect systemic stability should be higher than banks might choose voluntarily. There are many reasons for this, not least the difference between the private and the social costs of failure, and the distortion in incentives associated with safety net arrangements. Even if they start from the same basis of risk assessment, regulators would, in general, want a higher capital cushion than the industry.

V. The Focus of Banking Supervision

So far, I have been discussing how policies to promote financial stability need to be adapted to a world of integrated and global capital markets. I have spoken of the need for supervision of financial institutions to be in tune with market forces and effectively integrated with other aspects of overall systemic stability, and I have stressed the need for capital holding to be congruent with risk-taking. Let me now consider what the implications of this are for the practical ways in which financial supervisors need to go about their activities.

There was a time, not so long ago, when banks in most countries enjoyed a privileged franchise. Entry to the industry was restricted, the cost of deposits was regulated, and quasi-cartel arrangements preserved comfortable margins. In such circumstances, banks had little incentive to engage in high-risk activities. Their assets consisted mainly of loans to customers of generally quite high creditworthiness. The task of supervisors was to make sure that certain numerical constraints on balance-sheet relationships were observed.

Now, banks' special privileges have largely gone. The growth of competition means that all financial institutions have to justify their continued existence by producing a competitive return on capital. This in turn means that many of them have been reaching for yield by turning to increasingly risky activities, and by seeking innovative ways to economise on capital. The establishment of regulatory capital ratios has slowed but not reversed these trends. For, as I have just noted, if regulation requires banks to hold more capital than they think they need, they can find ways to use it in higher-yielding, and therefore riskier, ways.

In such circumstances, the prime requirement for the prudent conduct of business is a proper understanding of the measurement and pricing of risk, and a set of systems and controls that is capable of monitoring and controlling risk. This means that the former, quantitative tools of enforcing prudential norms are no longer adequate. What is required is the capacity to judge the overall management capacity and control environment in a supervised institution.

This implies an increasingly subtle approach to supervision. The Basle Committee's latest biennial report has some interesting observations on these changes in the conceptual approach. It speaks of: "a decline in the reliance on compliance with numerical standards, and a commensurate increase in the emphasis placed on more general concepts such as good governance, sound risk management and effective audit and control procedure. Supervision in the major financial centres now contains relatively more qualitative elements than in the past. This has made it in many ways a more difficult task and one which requires far more training and experience."

This is quite consistent with the broad theme of what I have been saying. As markets have become more integrated, and the activities of banks have become more complex, it is harder to foster prudent behaviour only through the adoption of administrative ratios and controls. An assessment of a financial intermediary must be based on how it measures and manages all the risks to which it is exposed, and on the attention it gives to its capacity to weather the adverse shocks that it is liable to encounter. Since these are attributes of a firm's culture, this assessment than can hardly be made solely on the basis of numerical relationships in a balance sheet at a single moment in time.

The supervisory profession is therefore in the process of becoming quite a bit more demanding. Unfortunately, this is occurring when supervisory resources are already stretched thin. This means that a major effort will have to be placed on recruitment and training. It would take me too far from the theme of this lecture to go into this issue in any detail. But let me just point out that the BIS and the Basle Committee have jointly established the BIS Institute for Financial

Stability, whose activities are just about to get under way. It is our hope that this institute will become the premier forum for developing thinking on financial stability issues, and for spreading best practice in supervisory policy. Our initial focus will of course be on the implementation of the Core Principles for Effective Banking Supervision, and we will be working closely with the Toronto International Leadership Centre. I hope that many in this audience will be able to benefit from our joint activities.

VI. Concluding Remarks

The broad themes I have been discussing can be recapitulated quite succinctly. The past two decades have seen a quantum increase in the influence of market forces in the economies of practically all nations. This has been the result partly of political choice and partly of innovation. Whatever the principal driving force, it is unlikely to be reversed.

The development of markets, in technical terms their "completeness", means that it is not possible to regulate them by controls that go against underlying economic incentives. It is too easy for market participants to find other channels for their activities that escape administrative controls. As a result, financial stability has to be based on a search for ways to reinforce the stabilising forces of markets, and the self-regulating instincts of market participants. The most promising avenues for doing this seem to be the development of codes of best practice and the encouragement of market transparency.

What are the implications for banking supervision? First, to continue the trend towards focusing on internal risk management systems and controls as the essential guarantee of prudent operation. Second, to design a capital adequacy regime that reinforces incentives to appropriately limit and price risk-taking over the cycle. And third, to encourage initiatives through which national experts from both industrial and emerging markets can develop and propagate standards of best practice.

Achieving financial stability is perhaps the most urgent task facing the world economy at the present time. If the international financial system cannot be made to operate in a more stable way, the prospects for an open and liberal approach to trade and capital flows are poor, and our hopes that the market system can contribute to the fundamental goals of development and poverty alleviation will be set back.

The stakes are high, and the community of banking supervisors is at the centre of the challenge. There could be no more fitting tribute to the memory of William Taylor than to successfully meet this challenge.

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Derivatives: Practices and Principles, Appendix III: Survey of Industry Practice
Global Derivatives Study Group. 1994

Derivatives: Practices and Principles, Appendix II: Legal Enforceability: Survey of Nine Jurisdictions
Global Derivatives Study Group. 1993

Derivatives: Practices and Principles, Appendix I: Working Papers
Global Derivatives Study Group. 1993

Derivatives: Practices and Principles
Global Derivatives Study Group. 1993

Clearance and Settlement Systems: Status Reports, Autumn 1992
Various Authors. 1992

Clearance and Settlement Systems: Status Reports, Year-End 1990
Various Authors. 1991

Conference on Clearance and Settlement Systems; London, March 1990: Speeches
Various Authors. 1990

Clearance and Settlement Systems: Status Reports, Spring 1990
Various Authors. 1990

Clearance and Settlement Systems in the World's Securities Markets
Steering & Working Committees of the Securities Clearance and Settlement Study. 1988

Occasional Papers:

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1990 M Street, N.W., Suite 450
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ISBN 1-56708-107-X