

FINANCIAL REFORM

A Framework for Financial Stability



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Group of Thirty

About the Authors

The views expressed in this paper are those of the Working Group on Financial Reform and do not necessarily represent the views of all of the individual members of the Group of Thirty.

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The Group of Thirty

1726 M Street, N.W., Suite 200

Washington, D.C. 20036

Tel: (202) 331-2472 Fax: (202) 785-9423

www.group30.org email:info@group30.org



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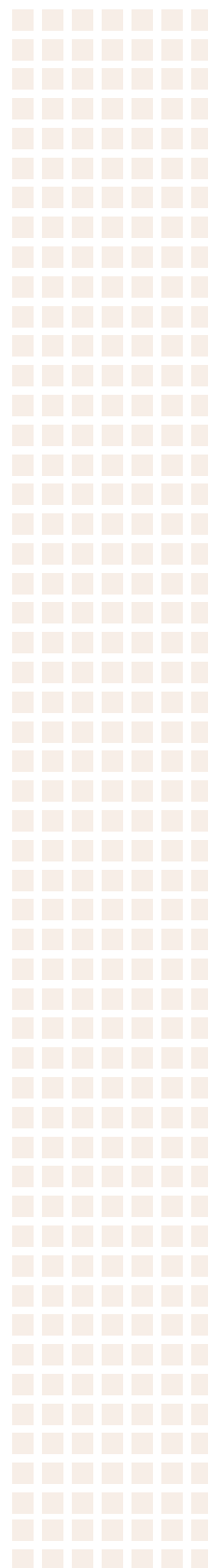
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ACRONYMS AND ABBREVIATIONS

CCP	Central counterparty [clearing]
CDO	Collateralized debt obligation
CDS	Credit default swap
CLO	Collateralized loan obligation
CRMPG	Counterparty Risk Management Policy Group
FDIC	Federal Deposit Insurance Corporation
FVA	Fair value accounting
GSE	Government-Sponsored Enterprise
NAV	Net asset value
NRSROs	Nationally Recognized Securities Ratings Organizations
OTC	Over-the-counter
SEC	Securities and Exchange Commission
SIV	Structured Investment Vehicle
TARP	Troubled Asset Relief Program



FOREWORD

In July 2008, the Group of Thirty (G30) launched a project on financial reform under the leadership of a Steering Committee chaired by Paul A. Volcker, with Tommaso Padoa-Schioppa and Arminio Fraga Neto as its Vice Chairmen. They were supported by other G30 members who participated in an informal working group. All members (apart from those with current and prospective national official responsibilities) have had the opportunity to review and discuss preliminary drafts.

The Report is the responsibility of the Steering Committee and reflects broad areas of agreement among the participating G30 members, who participated in their individual capacities. The Report does not reflect the official views of those in policymaking positions or in leadership roles in the private sector. Where there are substantial differences in emphasis and substance, they are noted in the text.

The G30 undertook this project as the global financial crisis entered its second year. The analysis has been informed by the extreme events later in 2008, which rocked the very foundation of the established financial system and which led to unprecedented and massive government intervention both in the United States and in many other countries to contain a spreading financial panic.

The Report does not address the need for these or possible further emergency actions. Difficult questions of weaning markets and financial institutions from official life support are sure to arise. While the analysis and recommendations deal in some instances with the need for legislation, regulation, and supervision, the Report is not directed toward questions about the appropriate focus and nature of national administrative arrangements. These are, in any event, influenced by the particular constitutional, legal, and administrative traditions of individual nations and regional arrangements.

The Report, rather, focuses on how the financial system might reasonably be organized once the present crisis has passed, to better assure a reasonable degree of stability. Policymakers, central bankers, and financial regulators will necessarily remain focused on dealing with immediate threats to the effective functioning of markets. However, in taking what are in effect emergency measures, a consensus on the desirable and lasting elements of a reformed system can be useful, and even necessary, to speed restoration of confidence in sturdy, competitive, and efficient financial arrangements serving both national and international markets. The Report, benefitting from the experience and broad perspective of G30 members, is intended to help inform the needed debate among policymakers and the international financial community on these issues. The Report addresses:

- a. The policy issues related to redefining the scope and boundaries of prudential regulation;

- b. Reforming the structure of prudential regulation, including the role of central banks, the implications for the workings of “lender-of-last-resort” facilities and other elements of the official “safety net,” and the need for greater international coordination;
- c. Improving governance, risk management, regulatory policies, and accounting practices and standards; and
- d. Improvements in transparency and financial infrastructure arrangements.

Two final notes are in order.

First, this Report is intended to be useful to policymakers in all the countries whose financial systems have been disrupted in this crisis. For this reason, most recommendations are framed in terms that should permit consideration in different countries in a fashion that takes account of particular features of their national systems. However, since this crisis has been rooted in developments within the United States, and given the particular importance of reforms to the U.S. financial system in terms of its size and global impact, several of the issues and recommendations have a direct U.S. focus.

Second, the focus of this Report is on the safety and soundness aspects of financial regulation. There are many other important aspects of financial regulation that are touched upon here only to the extent that they bear on financial stability, including competition policies, customer and investor protection, market practices oversight, and financial fraud and crime prevention. Also, to the extent distinctions are drawn between regulation and supervision, the former encompasses the setting of policies, principles, rules, and standards, while the latter encompasses the judgmental application of those policies and standards to particular institutions.

The key issue posed by the present crisis is crystal clear: How can we restore strong, competitive, innovative financial markets to support global economic growth without once again risking a breakdown in market functioning so severe as to put the world economies at risk?

The search for viable answers to that question needs to begin.



Paul A. Volcker
Chairman of the Trustees
The Group of Thirty



Jacob A. Frenkel
Chairman
The Group of Thirty

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In particular, we acknowledge the leadership of the Steering Committee, chaired by Paul Volcker and Vice Chairmen Arminio Fraga Neto and Tommaso Padoa-Schioppa. Their collective understanding of the nature of the financial crisis and insights as to the necessary reforms are invaluable.

Special recognition must also go to those members of the G30 who actively participated in the working group project deliberations and discussions.

Crafting a thoughtful report that addresses many difficult supervisory, regulatory, market, and other matters requires considerable knowledge of the issues and an ability to synthesize the views of numerous individuals. We particularly appreciate the work of Stephen Thieke, who served as principal draftsman of the report, who brought extraordinary experience and accomplishment to that role and to our deliberations.

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Jacob A. Frenkel

Chairman

The Group of Thirty

FINANCIAL REFORM WORKING GROUP

STEERING COMMITTEE

Chairman

Paul A. Volcker

Chairman of the Trustees, The Group of Thirty

Former Chairman, Board of Governors of the Federal Reserve System

Vice Chairman

Arminio Fraga Neto

Founding Partner, Gavea Investimentos

Former Governor, Banco do Brasil

Vice Chairman

Tommaso Padoa-Schioppa

Former Minister of Economy and Finance, Italy

Former Chairman, International Accounting Standards Committee

Former Member of the Executive Board, European Central Bank

Former Chairman, CONSOB, Italy

Project Director

Stephen Thieke, RiskMetrics

We thank the following members, who participated in the project in their individual capacities. The views expressed do not necessarily reflect those of the institutions with which they are affiliated.

Jacob A. Frenkel

Chairman, Group of Thirty

Vice-Chairman, American International
Group

Former Governor, Bank of Israel

E. Gerald Corrigan

Managing Director, Goldman Sachs
Group, Inc.

Former President, Federal Reserve
Bank of New York

Geoffrey L. Bell

Executive Secretary, Group of Thirty

President, Geoffrey Bell & Company

Andrew D. Crockett

President, JPMorgan Chase International

Former General Manager, Bank for
International Settlements

Richard Debs

Advisory Director, Morgan Stanley
Former President, Morgan Stanley
International
Former COO, Federal Reserve Bank
of New York

Jacques de Larosière

Counseiller, BNP Paribas
Former President, European Bank
for Reconstruction and Development
Former Managing Director, International
Monetary Fund
Former Governor, Banque de France

Gerd Häusler

Member of the Board of Directors and
Senior Advisor, RHJ International
Former Counsellor and Director,
International Monetary Fund
Former Managing Director, Dresdner Bank

John G. Heimann

Senior Advisor, Financial Stability Institute
Former U.S. Comptroller of the Currency

William R. Rhodes

Senior Vice Chairman, Citigroup
Chairman, President, and CEO,
Citicorp and Citibank

Ernest Stern

Partner and Senior Advisor,
The Rohatyn Group
Former Managing Director,
JPMorgan Chase
Former Managing Director, World Bank

David Walker

Senior Advisor, Morgan Stanley
International
Former Executive Director, Bank
of England
Former Chairman, Securities and
Investments Board, U.K.

Experts

Alan Beller, Cleary Gottlieb Steen & Hamilton, LLP
Mayree Clark, Aetos Capital
Mark Walker, Cleary Gottlieb Steen & Hamilton, LLP
Stuart P. M. Mackintosh, The Group of Thirty

INTRODUCTION

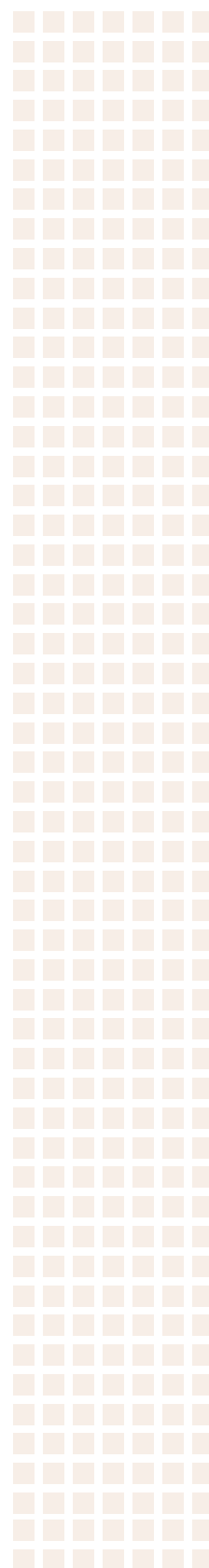
Market economies require robust and competitive financial systems, national and international, to intermediate between those with financial resources and those with productive and innovative uses for those resources. That intermediation necessarily poses risks—risk with respect to bridging maturity preferences of savers and borrowers and risk with respect to creditworthiness. The process, to be effective, depends on mutual trust—trust based on confidence in the integrity of institutions and the continuity of markets. That confidence, taken for granted in well-functioning financial systems, has been lost in the present crisis, in substantial part due to its recent complexity and opacity.

The costs and economic implications of the present crisis cannot be fully known at this point, but we know they are severe, whether measured in trillions of dollars, in the length and depth of the worldwide recession, or in the simple human terms of unemployment and shattered personal finances. We also know that there is a need for comprehensive reform that addresses the major institutional, market, regulatory, policy, and infrastructure weaknesses that have been exposed.

These include weak credit appraisal and underwriting standards; extreme and sometimes unrealized credit concentrations; misjudged maturity mismatches; wildly excessive use of leverage on and off balance sheets, often imbedded in little-understood financial products; and unwarranted and unsustainable confidence in uninterrupted market liquidity. Gaps in regulatory oversight, accounting, and risk management practices that exaggerated cycles, a flawed system of credit ratings, and weakness in governance also need attention.

To some degree, these factors have been evident in other, less damaging periods of financial crises. Two unique features have worked together to help account for the extent of the current market breakdown. Highly aggressive and unbalanced compensation practices have strongly encouraged risk taking over prudence. At the same time, highly engineered financial instruments, in their complexity, obscured the risk and uncertainties inherent in those instruments, giving rise to false confidence and heavy use of leverage to enhance profits, as asset prices rose. As those asset prices began declining, the risks became apparent, triggering sales of assets. A downward spiral of deleveraging has undermined the stability of even the largest financial institutions at the core of the system, contributing to an economic contraction of global proportions. Authorities in most countries have been stretched to and even beyond the limits of their capacity to restore liquidity and contain the instability.

This Report is organized as follows. Part 1 lays out an overview of a program of reform, the Group of Thirty guiding principles, and core recommendations. Part 2 through Part 5 lay out the reasoning behind and content of 18 specific policy recommendations. Specifically, Part 2 reviews the policy issues related to redefining the boundaries of prudential regulation; Part 3 reviews issues related to the strengthening of prudential regulation, including





the role of central banks, and international coordination; Part 4 addresses matters related to improving governance, risk management, regulatory policies, and accounting policies; Part 5 concerns needed improvements in transparency and financial infrastructure, including arrangements for clearing and settling over-the-counter transactions; Part 6 provides a concluding comment; and a full list of the recommendations provided throughout the Report can be found in the Appendix.



PART 1

An Overview of a Program for Reform

Recent market-driven forces, combined with the official responses, have set in motion strong pressures for consolidation within financial systems and wholesale changes in the structure of such systems. The potential for undue concentration, unfair competition, and increasing conflicts of interest will require attention. Massive extensions of the scale and reach of government safety nets protecting the financial system raise practical questions of fair and predictable official intervention, including issues arising from resulting government ownership interest, and, more fundamentally, questions as to the appropriate boundaries and expectations of such interventions by both financial institutions and their customers. The clear implication is that at least the very large and complex banking organizations that now account for so much of the extensions of credit and carry the major responsibility for maintaining the financial infrastructure will need to be held to more rigorous standards of prudential regulation and supervision, with new constraints on the type and scope of their risk-taking activities. Confidence in capital markets will also have to be restored, with more transparent and understandable markets and products.

At the same time, while there can be little doubt about the need for more effective official oversight, care must be taken not to extend the reach of regulations too far or too deeply. The new financial system must not become so entangled in restrictions that it cannot flexibly and efficiently support the process of financial intermediation so essential to economic progress.

A reform program that reflects a sensible balance between these considerations should help bring about:

- ▶ A system with clearer boundaries between those institutions and financial activities that require substantial formal prudential regulation for reasons of financial stability and those that do not.
- ▶ A system with stronger regulatory incentives for holding large (systemically significant) institutions to the highest standards of governance and risk management.
- ▶ A system in which there is more scope for using regulatory policies to mitigate inherent tendencies toward destabilizing excesses in risk taking and risk aversion.
- ▶ A system with a more robust failure resolution regime, having the practical capacity to permit orderly closings of large financial institutions and the administration of safety net resources in a manner that reinforces discipline on managers, shareholders, and sophisticated creditors.
- ▶ A system in which those responsible for prudential regulation and supervision have a high degree of political and market independence, and the resources necessary to supervise giant institutions and to keep abreast of market innovations.
- ▶ A system in which central bank responsibilities for promoting financial stability are supported by adequate authority and capacity.

- ▶ A system in which there are stronger incentives to achieve higher levels of risk transparency as regards financial products, markets, and institutions.
- ▶ A system in which there is a higher degree of international consistency and coordination as regards regulatory, supervisory, and accounting policies and crisis resolution practices.

GUIDING PRINCIPLES FOR FINANCIAL REFORM

The overall objective of the needed reform of the financial system must be to encourage diverse, competitive, predominantly privately owned and managed institutions and markets, able to efficiently and flexibly meet the needs of global, national, and local businesses, governments, and individuals. That broad objective, whether achieved through the spontaneous forces released by the current crisis or by considered public policy—most likely by a combination of the two—must also encompass assurance that instability in free financial markets not again reach the point of undermining the functioning of national or international economies.

In rebuilding what is now a broken system to meet those needs, certain guiding principles are particularly relevant. The recommendations set out in this report are responsive to these principles.

1. The Public Sector Role in Safeguarding Financial Stability

The inherent volatility of free and open financial markets, and the danger that volatility may occasionally reach crisis proportions threatening economic stability, needs to be recognized in the design of the financial system. The primary aim of prudential regulation should be to maintain the health of the system and contain systemic risk by:

- a. Subjecting the largest and most complex banking organizations judged to be systemically important to the highest international standards for ongoing close regulation and supervision.
- b. Requiring non-bank financial institutions that are also judged potentially to be of systemic importance to be subject to some form of formal prudential regulation and supervision to assure appropriate standards for capital, liquidity, and risk management.
- c. Assuring critical elements of the infrastructure supporting the financial system, including clearing and settlement systems and related legal frameworks, are made sufficiently robust to permit the orderly closing of large, complex financial institutions.
- d. Avoiding accounting, regulatory, or other practices that may inadvertently reinforce recurrent tendencies toward excessive exuberance or risk aversion.



2. Fair and Effective Competition

To enhance fair and effective competition, regulatory policies and approaches should, insofar as feasible, treat financial services common to different institutions uniformly by seeking:

- a. A balance between the benefits of open and free competition and the potential for unfair competition arising from explicit and implicit government protection, excessive concentration of financial resources, or extensive conflicts of interest.
- b. A balance between the protection implicit in access to central bank liquidity support for systemically important institutions and restrictions on risk-prone activities or those that present unmanageable conflicts of interest.

3. Official Oversight and Crisis Response

While the precise arrangements may differ among countries, official oversight and crisis response require building a strong, professionally managed structure of public agencies, with substantial insulation from particular political or private interests by assuring:

- a. Central banks, given their traditional role and concerns for financial stability, their financial resources, their responsibilities as “lender-of-last-resort,” and their typically professional management and high degree of independence within governments, have an important role in regulatory rules and oversight;
- b. In those rare and exceptional instances of crisis when budgetary resources are required or governmental funds are placed at risk, the responsibility lies with the appropriate governmental authorities to authorize such expenditures and to affirm and support central bank decisions.
- c. Basic crisis resolution procedures and resources should be available to official agencies to deal with instances of institutional failure so severe as to potentially impair system functioning.

4. International Consistency and Coordination

Effective application of these principles requires a substantial degree of international consistency in approach and coordination by means of:

- a. Reviewing and reinforcing existing efforts to achieve common capital, accounting, and reporting standards.
- b. Achieving a clear understanding of an appropriate response to failures or near failures of internationally active and systemically important financial institutions.

5. Governance and Risk Management

The need for high standards of institutional governance and risk management must be recognized, with emphasis on:

- a. Engaged and knowledgeable independent boards of directors focused on long-run performance;
- b. A corporate culture of governance that demands well-balanced compensation policies and practices and fosters incentives for disciplined risk management, including strong and independent risk management staffs;
- c. Regulatory and supervisory policies that reinforce those practices and incentives.

BOX 1 Key Characteristics of “Systemically Significant” Institutions

Key characteristics of potentially “systemically significant” institutions are:

1. **Size.** The notional balance sheet is a frequently used measure, but it is not in itself sufficient. More refined measures would take into account a combination of on- and off-balance-sheet items, with appropriate risk weightings. These metrics should then be viewed relative to the size of a country’s financial markets, banking system, and economy, with some individual institutions or national banking systems posing potential for problems that exceed a home country government’s support capacity.
2. **Leverage.** The scale of leverage being employed and the speed of potential liability contraction is a second important characteristic. Large size alone is not a sufficient determinant of potential systemic risk, if that size is supported by a combination of permanent equity and a structure of liabilities consistent with asset characteristics. It is the interaction of relatively illiquid risky assets and large amounts of short-term funding that creates the greatest potential for disruptive failures.
3. **Scale of Interconnectedness.** This refers to the degree to which one financial firm’s potential failure will have immediate and sizeable knock-on effects on a large number of other significant financial institutions. In this regard, perhaps the two best systemic risk metrics are: the scale (size) and scope (range of markets) of over-the-counter (OTC) derivative market contracts; and the largest gross and net collateral counterparty risk exposures to particular firms. The lack of transparency in these markets—as contrasted with exchange-based clearinghouse arrangements—has made judging systemically significant degrees of interconnectedness particularly difficult.
4. **The Systemic Significance of Infrastructure Services.** Certain types of infrastructure-like services provided by financial institutions to other such institutions are of systemic importance. These include highly specialized custody, clearing, settlement, and payment services, and many of the services provided by prime brokers. The nature of these services is such that they inevitably require large credit linkages between service providers and users, and changes in service relationships are operationally complex and time-consuming.

Throughout these principles, a consistent theme is the importance of containing systemic risk and maintaining close oversight of “systemically important” financial institutions. If the financial industry and markets are to operate, as far as possible, according to the principles of competitive markets, then exits of firms that are unprofitable and ineffective must be accepted. Regulation and supervision cannot and should not pursue an objective of zero failures even among the largest players. The primary aim of prudential regulation is to maintain the health of the system as a whole and contain systemic risk. The appropriate standards for judging regulatory effectiveness are limiting the potential for wildly disruptive institutional failures, managing the process of failures when they occur in a way that reinforces discipline on senior management and shareholders, and containing the market fallout from such failures.

There are general characteristics that together define a financial institution as “potentially systemically significant.” These are size, leverage, scale of interconnectedness, and the degree to which the company provides infrastructure services critical to the markets. These characteristics are described more fully in Box 1.

In practice, it is some combination of these characteristics that make for a potential “systemically important” financial institution. While these criteria can be defined in advance in general terms, it would not be sensible or prudent for regulators to define them with statistical precision or inflexibly. Rather, a country’s prudential regulator—in cooperation with its central bank in those countries where these roles are separate—should have sufficient authority to set and modify criteria used to make these determinations. The end result should be a basis for identifying firms that are likely to require potential regulatory intervention to manage the process of failure and hence also require more preventative oversight.

The common expression “too big to fail” is both misleading and too facile to reflect the reality of official support for “failing” institutions. In perhaps the most typical scenario, the institution is in fact permitted to fail, in the sense that practically all equity investments are lost. Depositors and often other unsophisticated creditors are protected, but the institution loses its identity by liquidation, merger, or effective public ownership. In some recent instances, support has been provided in a way that not only has protected all types of creditors, but has also let stockholders retain some equity interest with a hope of recovery, thus more accurately fitting the description of “too big to fail.”

FOUR CORE RECOMMENDATIONS

The reform proposals described in the body of this report consist of an extensive set of interrelated changes in policies, practices, and market standards. These are best viewed in the context of the following four broadly stated core recommendations, which provide a framework for the overall program of reform:

- I. **Gaps and weaknesses in the coverage of prudential regulation and supervision must be eliminated.** All systemically significant financial institutions, regardless of type, must be subject to an appropriate degree of prudential oversight. (Recommendations 1 through 5.)
- II. **The quality and effectiveness of prudential regulation and supervision must be improved.** This will require better-resourced prudential regulators and central banks operating within structures that afford much higher levels of national and international policy coordination. (Recommendations 6 through 8.)
- III. **Institutional policies and standards must be strengthened, with particular emphasis on standards for governance, risk management, capital, and liquidity.** Regulatory policies and accounting standards must also guard against procyclical effects and be consistent with maintaining prudent business practices (Recommendations 9 through 12.)
- IV. **Financial markets and products must be made more transparent, with better-aligned risk and prudential incentives. The infrastructure supporting such markets must be made much more robust and resistant to potential failures of even large financial institutions.** (Recommendations 13 through 18.)



PART 2

*Redefining the Boundaries
of Prudential Regulation*



CORE RECOMMENDATION I

Gaps and weaknesses in the coverage of prudential regulation and supervision must be eliminated. All systemically significant financial institutions, regardless of type, must be subject to an appropriate degree of prudential oversight.

Financial institutions and the system in which they operate develop in response to an ongoing dynamic tension among competitive market forces, innovations that alter those forces, and laws and regulations that constrain choices, influence innovations, and then respond to subsequent market development. While the increased degree of international integration of financial markets has worked to bring about a degree of convergence in key characteristics of national financial systems, there remain a number of significant differences in the financial institutions structures across the economically most-developed and emerging countries and in the nature of official response to failures and market disruptions.

In times of financial crisis, such as we are now experiencing, these differences can have an important bearing on how a crisis unfolds and what type of policy responses are required. Significantly, actions taken by one or more European countries to protect depositors rapidly influenced flows of funds in other national jurisdictions with different banking systems and regulatory authorities. Because of a number of distinguishing institutional characteristics, the current crisis has raised an unusually large number of questions within the United States as to how best to define the boundaries for prudential regulation and supervision.

The U.S. financial system is large, complex, and multifaceted, with characteristics distinguishing it from systems in other major countries. These characteristics, which have led to particular challenges in responding to the current crisis, are: (a) the relative size and importance of capital markets; (b) the relative size and importance (until recently) of stand-alone investments banks; (c) the regional and local nature of much of the deposit banking system; (d) the nature of the regulation of the insurance sector; (e) the size of federal government direct and sponsored involvement in market-based credit intermediation; and (f) the complexity of the structure of U.S. regulation and supervision. (These characteristics are described in more detail in Box 2).

In several important respects, it was problems at firms that were underregulated or unregulated that became a flash point for the spread of the subprime mortgage crisis. At the start of 2008, there were eight very large non-bank U.S. financial firms that should have been regarded as systemically significant; five investment banks, the world's largest insurance company, and two Government-Sponsored Enterprises (GSEs). All of these firms have been radically transformed.

There was also a run on U.S. money market mutual funds, leading to a rushed program of temporary federal insurance, backed by an unprecedented use of the resources of the Treasury's Exchange Stabilization Fund. A series of central bank programs have provided sizeable direct support to the commercial paper funding markets. Finally, with the cre-

ation of a large fund authorized by Congress, the Troubled Asset Relief Program (TARP), expanded programs of Federal Deposit Insurance Corporation (FDIC) debt guarantees, and extensive central bank asset market support programs, public sector financial support is being provided to the capital structure of institutions and across a broad range of markets.

BOX 2 The U.S. Financial System

The following describes six particular characteristics of the U.S. financial system that distinguish it from other systems.

1. **The relative size and importance of capital-market-based credit intermediation channels.** This includes the markets for corporate debt (investment-grade and high-yield bonds and commercial paper); the markets for asset-based credit (housing, auto loans, credit cards, and many other receivables, and markets for structured credit products); the size and importance of the over-the-counter (OTC) derivatives markets; and the money market mutual funds market channel for intermediating liquid assets and meeting liquidity needs. In the markets for housing finance, there are the additional elements of networks of mortgage brokers and originators that operate largely, if not entirely, outside the boundaries of the regulated banking system. To be sure, all these market channels require banking system backup and support, but as alternative channels to the banking system, they are very large and relatively more significant than in most other countries.
2. **The (until very recently) size and relative importance of stand-alone investment banks, as distinct from commercial banks, in the market-based credit intermediation process.** This is tied closely to developments in point 1 above and also to the forced separation of these two parts of the industry for most of the 20th century. As the commercial bank and investment bank sectors effectively merged into direct competition—and as traditional institutional asset managers were limited in their capacity to adapt to the emergence of derivative markets and various other tools for leverage—private pools of capital (that is, private equity funds and hedge funds) have grown to a scale and position of relative importance that is unmatched in any other large country financial system, with the possible exception of the U.K.
3. **The local and regional nature of the deposit-based banking system in the United States.** Until recently, only one of the five largest U.S. banks operated with a nationwide deposit-taking franchise. Moreover, while limited, arrangements still exist under which non-bank financial and non-financial corporations can control government-insured savings banks and state-chartered industrial banks, while being subject to minimal or even no consolidated regulation and supervision.
4. **The absence of national-level regulation of the insurance segment of the U.S. financial system.** This framework of state, rather than national, laws and regulations has limited the degree and effectiveness of oversight of the capital market activities of large, complex affiliates of regulated insurance companies.
5. **The size of direct and sponsored federal government involvement in market-based housing finance channels.** This has been large, if not widely understood, reflecting the size of and political support for residential mortgage financing. The combined size of the balance sheets plus off-balance-sheet guarantees of the Government Sponsored Enterprises (including Fannie Mae, Freddie Mac, and the Federal Home Loan Bank System), and the size of full faith and credit entities such as the Federal Housing Administration and the Government National Mortgage Association, represents a significant direct and indirect claim on the public sector relative to the size of the U.S. marketplace.



In response to these crisis-driven events and regulatory interventions, the United States is moving rapidly to a financial system in which a small number of exceptionally large bank holding companies are at the core of the system. These firms are, and presumably will continue to be, characterized by a scale and complexity that market participants and Administrations will regard as both too big and too interconnected to be allowed to default on creditor obligations or disappear. Indeed, potential failure would be likely to require extensive government intervention and government assistance, with few if any domestic institutions capable of acquiring them in their entirety.

These core institutions are gaining even larger dominant positions in terms of credit and capital market activities, large-scale corporate banking, nationwide deposit taking, and many other segments of the corporate and retail financial business. If permitted by law and regulation, these firms will likely become integrated across business lines and geographies, will maintain a presence as operators of private pools of capital, will dominate the core of the OTC derivative markets, and will step into any void created by the truncation of the GSEs in terms of various forms of housing finance.

These developments are widely viewed as portending a further round of extensive consolidation in the U.S. banking system. How fast and far that proceeds will depend not only on economic and market developments, but also on how government programs deliberately or otherwise encourage mergers and on how statutory limits on deposit concentration and certain functions are administered or modified.

Plainly, these developments pose public policy issues, including questions of excessive concentration, competitive fairness, moral hazard, and conflicts of interest, which are not new. In the past, they have been dealt with in a piecemeal and poorly coordinated fashion. The rush of recent events and the scale of structural changes that have been set in motion add to both the complexity and urgency of developing more appropriate policies.

In sum, market forces and crisis-driven actions have moved the United States perhaps beyond a point of no return, toward a financial system with a much greater concentration of financial resources and influence in a small number of extremely large and complex banking organizations. In other major countries, concentration in a relatively few institutions has been more common. However, the changes forced by this financial crisis, toward further consolidation in national banking systems and renewed importance of the banking sector relative to non-bank financial and capital market sectors, are of a different magnitude.

The events of 2008 underscore the importance of redefining the boundaries of the official “safety net” and of prudential regulation, strengthening the effectiveness and streamlining the structure of financial regulation, and reassessing the role of central banks and the effectiveness of the tools available to them.

1. Prudential Regulation and Supervision of Banking Organizations

No matter how robust failure management mechanisms are, markets are likely to presume that the largest regulated financial institutions will, to some extent, be protected against the full force of market discipline with the potential consequence of encouraging excessive risk taking—the essence of moral hazard. To compensate for this, and to keep the probability of potential failure of such institutions to acceptably low levels, existing regulatory standards and supervisory approaches will need to be upgraded. The necessary corollary is increased emphasis on the quality and level of regulatory and supervisory resources.

Recent experience in the United States and elsewhere has demonstrated instances in which unanticipated and unsustainably large losses in proprietary trading, heavy exposure to structured credit products and credit default swaps, and sponsorship of hedge funds have placed at risk the viability of the entire enterprise and its ability to meet its responsibilities to its clients, counterparties, and investors.

These activities, and the “originate-to-distribute” model, which facilitated selling and re-selling highly engineered packages of consolidated loans, are for the most part of relatively recent origin. In essence, these activities all step away from the general concept of relationship banking, resting on individual customer service, toward a more impersonal capital markets transaction-oriented financial system. What is at issue is the extent to which these approaches can sensibly be combined in a single institution, and particularly in those highly protected banking institutions at the core of the financial system.

Almost inevitably, the complexity of much proprietary capital market activity, and the perceived need for confidentiality of such activities, limits transparency for investors and creditors alike. In concept, the risks involved might be reduced by limiting leverage and attaching high capital standards and exceptionally close supervision.

Some members of the G30 feel such an approach could be sufficient to deal with these risks. In practice, any approach must recognize that the extent of such risks, potential volatility, and the conflicts of interests will be difficult to measure and control. Experience demonstrates that under stress, capital and credit resources will be diverted to cover losses, weakening protection of client interests. Complex and unavoidable conflicts of interest among clients and investors can be acute. Moreover, to the extent that these proprietary activities are carried out by firms supervised by government and protected from the full force of potential failure, there is a strong element of unfair competition with “free-standing” institutions. In the last analysis, there is a more intangible aspect highlighted by recent experience. Is it really possible, with all the complexities, risks, and potential conflicts, that even the most dedicated board of directors and top management can understand and maintain control over such a diverse and complex mix of activities?

These questions are related to the issue of whether prudential regulation and supervision should follow functional or consolidated lines: should primary supervision of trading and securities activities, hedge funds, investment management, and other elements of a large banking organization be the responsibility of security or market authorities to facilitate competitive equality, or should a single regulator take responsibility for prudential supervision of an entire diversified banking organization or other institutions of systemic importance? If the consolidation of oversight takes place in an institution apart from the central bank, the “last resort” funder for troubled institutions, what principles can be established to encourage appropriate relationships among the various agencies and with the treasury or finance ministry that carry broad governmental responsibilities?

Setting out a reasonable and desirable approach toward these organizational and regulatory challenges lies at the heart of fashioning the new financial system. The following recommendations suggest such an approach.

Recommendation 1:

- a. In all countries, the activities of government-insured, deposit-taking institutions should be subject to prudential regulation and supervision by a single regulator (that is, consolidated supervision). The largest and most complex banking organizations should be subject to particularly close regulation and supervision, meeting high and common international standards.
- b. Large, systemically important banking institutions should be restricted in undertaking proprietary activities that present particularly high risks and serious conflicts of interest. Sponsorship and management of commingled private pools of capital (that is, hedge and private equity funds in which the banking institutions own capital is commingled with client funds) should ordinarily be prohibited and large proprietary trading should be limited by strict capital and liquidity requirements. Participation in packaging and sale of collective debt instruments should require the retention of a meaningful part of the credit risk.
- c. In general, government-insured deposit-taking institutions should not be owned and controlled by unregulated non-financial organizations, and strict limits should be imposed on dealings among such banking institutions and partial non-bank owners.
- d. To guard against excessive concentration in national banking systems, with implications for effective official oversight, management control, and effective competition, nationwide limits on deposit concentration should be considered at a level appropriate to individual countries.

2. Consolidated Supervision of Non-Bank Financial Institutions

Recent experience in dealing with troubled but systemically significant non-bank financial institutions in some countries points to the need for consolidated regulation and supervision of such institutions.

Recommendation 2:

- a. For those countries lacking such arrangements, a framework for national-level consolidated prudential regulation and supervision over large internationally active insurance companies should be established.
- b. An appropriate prudential regulator should be designated for those large investment banks and broker-dealers that are not organized as bank holding companies.

3. Money Market Mutual Funds and Supervision

The widespread run on money market mutual funds has underscored the dangers of institutions with no capital, no supervision, and no safety net operating as large pools of maturity transformation and liquidity risk. These have been compounded by provision of transaction account services, with withdrawals on demand at par, mimicking the services of regulated commercial banks. A regulatory distinction should be drawn between those services that are most appropriately housed in regulated and supervised banks, particularly the right to withdraw funds on demand at par, and those that can reasonably be provided by mutual funds focused on short-term fixed-rate credit instruments.

Recommendation 3:

- a. Money market mutual funds wishing to continue to offer bank-like services, such as transaction account services, withdrawals on demand at par, and assurances of maintaining a stable net asset value (NAV) at par, should be required to reorganize as special-purpose banks, with appropriate prudential regulation and supervision, government insurance, and access to central bank lender-of-last-resort facilities.
- b. Those institutions remaining as money market mutual funds should only offer a conservative investment option with modest upside potential at relatively low risk. The vehicles should be clearly differentiated from federally insured instruments offered by banks, such as money market deposit funds, with no explicit or implicit assurances to investors that funds can be withdrawn on demand at a stable NAV. Money market mutual funds should not be permitted to use amortized cost pricing, with the implication that they carry a fluctuating NAV rather than one that is pegged at US\$1.00 per share.



4. Oversight of Private Pools of Capital

The issue of the appropriate prudential regulatory treatment of private pools of capital—more specifically, hedge funds—has been considered by policymakers numerous times since the collapse of Long Term Capital Management in 1998. The generally prevailing view has been to continue to rely on a combination of: (a) enhanced market discipline, (b) indirect oversight via close scrutiny of the regulated intermediaries they use for financing and operating services, and (c) moral suasion to encourage the spread of improved risk management and compliance practices. In some jurisdictions, such as the U.K., this has been supplemented by formal regulatory oversight of the local managers—but not the funds themselves—and more formal arrangements to develop best practices standards, which have been encouraged by its recently created Hedge Funds Standards Board.

Taken together, these measures have had some degree of success, in terms of bringing about improvements in hedge fund risk management and funding practices, and improved counterparty risk management practices. Nonetheless, volatility has been greater than anticipated, with instances of strongly adverse consequences for sponsoring institutions, including some of systemic importance.

The question, going forward, is whether experience warrants a continuation of the largely unregulated status of hedge funds, and if not, the extent of such regulation. Several indications point toward limited and flexible official regulation. The need for greater transparency supports the introduction of formal authority to register and track those funds, in terms of size, use of leverage, risk styles, and other important variables. This authority should be associated with the jurisdictions in which the fund managers conduct a majority of their business. Second, efforts to achieve continuous improvement in market and counterparty discipline would be enhanced by formal regulatory authority relative to the funds and managers. Third, the increased emphasis on financial stability in the mandates of prudential regulators and central banks points to the need for greater, more systemic access to information crucial to understanding the potential for growing risk imbalances in the system. Finally, there can be no assurances—especially if this sector continues to grow in relative importance—that the largest, most complex funds might not become a future source of significant systemic risk.

While less pressing, similar considerations may be relevant for large private equity funds operating on the basis of substantial borrowing. In contrast, venture capital funds, dealing by their nature with small companies and providing essential capital and managerial support for entrepreneurial innovation, need to be free of inhibiting oversight.

Recommendation 4:

- a. Managers of private pools of capital that employ substantial borrowed funds should be required to register with an appropriate national prudential regulator. There should be some minimum size and venture capital exemptions from such registration requirement.

- b. The prudential regulator of such managers should have authority to require periodic regulatory reports and public disclosures of appropriate information regarding the size, investment style, borrowing, and performance of the funds under management. Since introduction of even a modest system of registration and regulation can create a false impression of lower investment risk, disclosure, and suitability standards will have to be reevaluated.
- c. For funds above a size judged to be potentially systemically significant, the prudential regulator should have authority to establish appropriate standards for capital, liquidity, and risk management.
- d. For these purposes, the jurisdiction of the appropriate prudential regulator should be based on the primary business location of the manager of such funds, regardless of the legal domicile of the funds themselves. Given the global nature of the markets in which such managers and funds operate, it is imperative that a regulatory framework be applied on an internationally consistent basis.

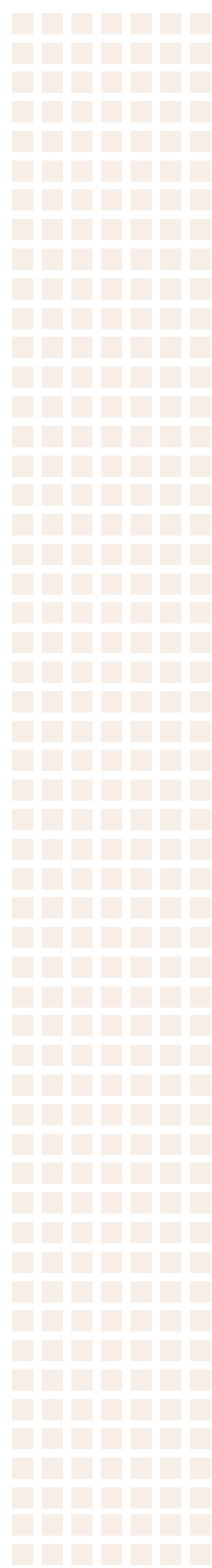
5. Government-Sponsored Enterprises

The hybrid business model of the housing finance Government-Sponsored Enterprises (GSEs), in which they are both profit-seeking private companies and agents of government policy, has been shown to be unworkable over time and particularly in the midst of crises. The sense of an implicit government backing facilitated a degree of leverage and risk taking that proved unsustainable. The specialized regulatory oversight was both inadequate and too susceptible to political pressure. This was compounded by misaligned incentives in bank capital rules for banks to take on oversized exposures to these GSEs. The competition from private market firms further induced the GSEs to expand into higher risk-taking activities and lower underwriting standards in the interests of maintaining a dominant market position. Then, in the face of the fall of housing market prices, the GSEs had lost the capacity to provide strong support for the mortgage market, which was their public mandate. In the end, the government had no choice but to intervene directly.

Two important financial policy lessons are: (a) the crucial importance of clearly separating government financial support from private profit seeking; and (b) the need for any chosen level of government support to be explicit and properly accounted for. These lessons are relevant for other industries and other countries.

Recommendation 5:

- a. For the United States, the policy resolution of the appropriate role of GSEs in mortgage finance should be based on a clear separation of the functions of private sector mortgage finance risk intermediation from government sector guarantees or insurance of mortgage credit risk.
- b. Governmental entities providing support for the mortgage market by means of market purchases should have explicit statutory backing and financial support. Hybrids of



private ownership with government sponsorship should be avoided. In time, existing GSE mortgage purchasing and portfolio activities should be spun off to private sector entities, with the government, if it desires, maintaining a capacity to intervene in the market through a wholly owned public institution.



PART 3

*The Structure of Prudential Regulation
and International Coordination*



CORE RECOMMENDATION II

The quality and effectiveness of prudential regulation and supervision must be improved. This will require better-resourced prudential regulators and central banks operating within structures that afford much higher levels of national and international policy coordination.

6. Regulatory Structure

The recent G30 report, *The Structure of Financial Supervision*, presents in some detail the characteristics of four different approaches to the organization of financial regulation and supervision. The four approaches are: institutional, functional, integrated, and twin peaks. These different approaches are described in detail in Box 3.

The conceptual pros and cons of each approach are set out in the earlier report and will not be repeated here. The direction of change is clear—that is, to some variant of either the twin-peaks (regulation by objective) or integrated approach. Either approach, and a number of variants on them, is compatible with the large, bank-centered structures that are emerging within most countries.

BOX 3 The Structure of Financial Supervision

The four approaches to the structure of financial supervision can be described as follows.

1. **The institutional approach:** In which a firm's legal status (for example, a bank, broker-dealer, or insurance company) determines which regulator is tasked with overseeing its activity from both a safety and soundness and a business conduct perspective (for instance, as in China, Hong Kong, and Mexico).
2. **The functional approach:** In which supervisory oversight is determined by the business that is being transacted by the entity, without regard to its legal status. Each type of business may have its own functional regulator (for instance, as in France and Italy).

(In practice, as the institutional approach has progressively become outmoded, supervisors using this structure have moved toward a functional approach, so the line between the two has become blurred.)

3. **The integrated approach:** In which a single, universal regulator conducts both safety and soundness oversight and conduct-of-business regulation for all the sectors of financial services business (for instance, as in Germany, Japan, and the United Kingdom).
4. **The twin-peaks approach:** A form of regulation by objective in which there is a separation of regulatory functions between two regulators: one that performs the safety and soundness supervision function and the other that focuses on conduct-of-business regulation (for instance, as in Australia and the Netherlands).

To a significant extent, the choice of which regulatory structural model to employ has to reflect a balancing of country-specific preferences, with appropriate weight to its founding political principles such as, in the United States, the principles of checks and balances, and a mix of Federal and State authority. There is, therefore, no single correct answer to the question of what is the optimal structure for organizing financial regulation and supervision. There is, however, an emerging consensus around a number of key points, including: (a) the need to substantially simplify and consolidate overly complex structures; (b) the emphasis on clarifying and stressing guiding principles of regulation rather than a rules-based approach to regulation; (c) the importance for much greater levels of international cooperation and coordination on such matters as accounting standards, listing standards, licenses to operate as regulated firms, supervisory oversight mechanisms, and, most important, prudential capital and liquidity standards; (d) the importance of regulatory arrangements having the flexibility to adapt to new types of institutions, instruments, and markets; and (e) the need to ensure the political and market independence of national regulatory authorities. Finally, there is a growing appreciation of the importance of ensuring that central bank responsibility for promoting financial stability is supported by adequate authority and capacity.

Regardless of how regulatory agencies are reorganized, prudential supervisors have a common need to better ensure that financial institutions adequately prepare for and respond to periods of financial stress. That role requires a renewed emphasis on the complex nature of judgments about the stability of large banking organizations. The caliber, quality, and integrity of people required to meet these challenges points to the need for more substantial efforts to attract, develop, and retain individuals fully capable of engaging senior private sector counterparts.

Recommendation 6:

- a. Countries should reevaluate their regulatory structures with a view to eliminating unnecessary overlaps and gaps in coverage and complexity, removing the potential for regulatory arbitrage, and improving regulatory coordination.
- b. In all cases, countries should explicitly reaffirm the insulation of national regulatory authorities from political and market pressures and reassess the needs for improving the quality and adequacy of resources available to such authorities.

7. Role of the Central Bank

A central policy issue in regulatory reorganization is how to strike the right balance between the role of the central bank and that of other national regulators. National governments must decide precisely where to strike that balance. What is important is to do so in a fashion that properly enables the central bank to fulfill its main policy missions. Beyond the central mission of monetary policy, central banks normally have a role in managing and

supporting payments systems, in providing liquidity to banks in times of stress, and more broadly in maintaining financial stability.

Recent events provide impetus for recognizing a financial stability role for central banks. That carries with it a need for adequate authority and the tools to carry out this mission. Broader authority to collect information helpful to understanding potential threats to stability is but one element of this. Another is how best to combat the development of financial excesses before they build into full-fledged crises. More countercyclical regulatory and supervisory policies are one such tool. Consideration of asset market developments in setting monetary policies has been a controversial but important debate.

To the extent that excessive use of leverage is a recurring significant contribution to potential financial instability, central banks may consider the value of employing countercyclical tools that work directly to avoid excesses. Some form of broad-based collateral requirements or margin-setting authority, including authority to set minimum initial and maintenance margin requirements across a broad range of financial asset markets and instruments in which leverage is typically employed, is a possibility. As with any formal rule-making authority, over time, market practices and innovations will develop to exploit gaps and weaknesses. Any rule that forces market participants to hold more collateral than they would voluntarily creates some costs. These, however, are not reasons to abandon consideration of expanding the tools available to temper extreme financial excesses that potentially create far greater costs.

An important element of post-crisis reform is to consider which crisis management actions and innovations developed by central banks should usefully remain part of policymakers' toolkits and which should be strictly limited or eliminated entirely. The point is that broadly extending the safety net may actually encourage risk taking to the point of facilitating future excesses and carry central banks into areas more appropriately reserved for political authorities.

Recommendation 7:

- a. Where not already the case, central banks should accept a role in promoting and maintaining financial stability. The expectation should be that concerns for financial stability are relevant not just in times of financial crisis, but also in times of rapid credit expansion and increased use of leverage that may lead to crises.
- b. In countries where the central bank is not the prudential regulator, the central bank should have: (i) a strong role on the governing body of the prudential and markets regulator(s); (ii) a formal review role with respect to proposed changes in key prudential policies, especially capital and liquidity policies and margin arrangements; and (iii) a supervisory role in regard to the largest systemically significant firms, and critical payment and clearing systems.

- c. A sharp distinction should be maintained between those regulated banking organizations with normal access to central bank liquidity facilities and other types of financial institutions whose access, if any, should be limited to extreme emergency situations of critical systemic importance.
- d. Central bank emergency lending authority for highly unusual and exigent circumstances should be preserved, but should include, by law or practice, support by appropriate political authorities for the use of such authority in extending such credit to non-bank institutions.
- e. Central bank liquidity support operations should be limited to forms that do not entail lending against or the outright purchase of high-risk assets, or other forms of long-term direct or indirect capital support. In principle, those forms of support are more appropriately provided by directly accountable government entities. In practice, to the extent the central bank is the only entity with the resources and authority to act quickly to provide this form of systemic support, there should be subsequent approval of an appropriate governmental entity with the consequent risk transfer to that entity.

8. International Coordination

There is much that can be done to improve international regulatory and supervisory coordination. Certain specific and needed enhancements can and should move forward within the existing framework of international cooperation. The most pressing and complex of those enhancements relate to making crisis management coordination more effective and operational by agreed protocols. Effective and timely information sharing, including information about large individual institutions operating in a number of jurisdictions, is a start. Greater clarity is required as to which jurisdiction or agency has the responsibility, in terms of managing the failure process, and how the costs of failure and the burdens of financial support, to the extent needed, will be shared. In the current market environment, some of the largest regulated financial institutions have grown to a scale that raises questions as to the capacity of some home country regulators to manage and support the failure resolution process. These concerns warrant early high-level consideration within international policy forums.

Recommendation 8:

- a. National regulatory authorities and finance ministers are strongly encouraged to adapt and enhance existing mechanisms for international regulatory and supervisory coordination. The focus of needed enhancements should be to: (i) better coordinate oversight of the largest international banking organizations, with more timely and open information sharing, and greater clarity on home and host responsibilities, including in crisis management; (ii) move beyond coordinated rule making and standard setting to the identification and modification of material national differences in the



application and enforcement of such standards; (iii) close regulatory gaps and raise standards, where needed, with respect to offshore banking centers; and (iv) develop the means for joint consideration of systemic risk concerns and the cyclicity implications of regulatory and supervisory policies. The appropriate agencies should strengthen their actions in member countries to promote implementation and enforcement of international standards.

- b. Given the recurring importance of excessive leverage as a contributing factor to financial disruptions, and the increasingly complex ways in which leverage can be employed on and off balance sheets, prudential regulators and central banks should collaborate with international agencies in an effort to define leverage and then collect and report data on the degree of leverage and maturity and liquidity mismatches in various national systems and markets.
- c. To the extent new international regulatory organizations are ultimately needed, the initial focus should be on developing more formal regional mechanisms, such as in the European Union, but with continued attentiveness to the global dimension of most significant financial markets.



PART 4

*Improving Standards for
Governance, Risk Management,
Capital, and Liquidity*



CORE RECOMMENDATION III

Institutional policies and standards must be strengthened, with particular emphasis on standards for governance, risk management, capital, and liquidity.

Regulatory policies and accounting standards must also guard against procyclical effects and be consistent with maintaining prudent business practices.

In a market-based financial system, many stakeholders are involved: shareholders, managers and other employees, clients, regulators, and the public at large. For each stakeholder, costs and benefits and risks and rewards should—as far as possible—be balanced. A prerequisite for this is that incentives should be consistent with the principle that risks should be borne by those who take them. The more this condition is satisfied—and one role of public policy is to help bring this about—the more the risk of systemic instability is reduced. A second prerequisite is that risks must be as transparent as possible to the relevant stakeholders in financial institutions. The more opaque are the risks being taken, the more difficult it is for stakeholders to ascertain if there is reasonable balance between risks and expected rewards.

In looking back at the array of problems encountered during this financial crisis, there are numerous examples of misaligned incentives, of incentives that contribute to instability and cyclicity in financial markets, and of shortcomings in the transparency of risks, in firms, in markets, and in structured products.

The first step toward improving incentives and transparency must be taken at the level of private sector firms central to financial risk intermediation. Further steps can be taken by regulators and by accounting standard setters.

9. Regulatory Standards for Governance and Risk Management

To be effective and sustainable, improvements in governance and risk management must be driven by leadership in private sector firms incorporated into a business culture that promotes discipline and a focus on long-run performance. Direction for that must start at the top, with boards of directors that are engaged and up to the task of overseeing the complexities of modern financial risk management. Complexities cannot be an excuse for poorly prepared and informed boards. In the first instance, senior management has responsibility for providing boards with timely information, and, if necessary, the training necessary to use it. In turn, boards must be populated with sufficient expertise to absorb such information and act on it, if need be with the benefit of independent outside advice. If these criteria cannot be met, the argument for reducing the size and complexity of these organizations becomes relevant.

In terms of specific improvements in firm risk management practices, leading firms in the financial industry have in recent years together assessed their capacity and willingness to

cooperate in taking corrective steps to forestall crises. It is less clear how diligent firms and regulators have been in following up on implementation of recommended improvements. It is quite clear that what had been recommended before this most severe of crises was not sufficient to prevent the erosion of discipline at many leading firms. This suggests the need for a more systematic and forceful follow-up on implementation of best practices, by senior management, by boards, and by regulators.

Finally, this crisis has driven home the importance of aligning compensation practices with the incentives and controls in a firm's risk management program. Senior management and boards need to ensure a consistency in that respect, aligning pay with long-run shareholder interest rather than short-term returns that cannot be sustained and entail greater risk. Regulators need to satisfy themselves on this score and factor misaligned incentives into their overall judgments regarding the quality of the firm's risk management capabilities.

Recommendation 9:

Regulatory standards for governance and risk management should be raised, with particular emphasis on:

- a. Strengthening boards of directors with greater engagement of independent members having financial industry and risk management expertise;
- b. Coordinating board oversight of compensation and risk management policies, with the aim of balancing risk taking with prudence and the long-run interests of and returns to shareholders;
- c. Ensuring systematic board-level reviews and exercises aimed at establishing the most important parameters for setting the firm's risk tolerance and evaluating its risk profile relative to those parameters;
- d. Ensuring the risk management and auditing functions are fully independent and adequately resourced areas of the firm. The risk management function should report directly to the chief executive officer rather than through the head of another functional area;
- e. Conducting periodic reviews of a firm's potential vulnerability to risk arising from credit concentrations, excessive maturity mismatches, excessive leverage, or undue reliance on asset market liquidity;
- f. Ensuring that all large firms have the capacity to continuously monitor, within a matter of hours, their largest counterparty credit exposures on an enterprisewide basis and to make that information available, as appropriate, to its senior management, its board, and its prudential regulator and central bank;
- g. Ensuring industrywide acceptance of and action on the many specific risk management practice improvements contained in the reports of the Counterparty Risk Management Policy Group (CRMPG) and the Institute of International Finance.

10. Regulatory Capital Standards

The business of banking is inherently cyclical. Movements in asset prices, collateral values, asset quality, capital market transaction volumes, and market liquidity all reflect economic fluctuations with consequences for earnings growth and capital generation. Regulatory policies and practices cannot repeal business cycles. They can, however, be assessed in terms of the impact they have in amplifying institutional behavior during the cycle. In seeking to temper regulatory sources of procyclicality, the objective should be to reinforce the primary aim of prudential regulation—to maintain the health of the system and contain systemic risk.

There are several aspects of prudential regulatory policies in which procyclical features are evident: capital standards, liquidity policies, and reserving practices. These are discussed in this section. Extensive regulatory policy improvement efforts are already under way, under the leadership of the Financial Stability Forum and the Basel Committee on Banking Supervision.

Prudential supervisors have a critical role to play in ensuring that the largest banking organizations adequately prepare for and respond to the ups and downs of cycles. Well-designed and sensibly executed supervisory programs will be an essential element of effective regulatory reform efforts to dampen procyclicality. A starting point for avoiding excessive risk is to support efforts of supervisors to report on and push back against erosion in risk standards and discipline during periods of economic expansion and confidence.

In this same vein, when risks are materializing and extreme pressures mounting, it is even more challenging for supervisors not to overreact to the use of capital, reserve, and liquidity buffers that should have been built up for use in just such circumstances. All this further underscores the importance of these agencies having high-quality resources with the independence to carry out this complex task.

A particularly disturbing aspect of the current crisis is the speed with which large regulated financial institutions moved from being represented as well capitalized with strong liquidity positions to requiring government interventions and sizeable financing support to avoid bankruptcy. To be sure, financial panics can produce conditions that are unmanageable for even very strong financial institutions, as they all require market confidence to function properly. But it is also true that existing international capital standards have lost credibility with market participants. It is critically important that market credibility be reestablished.

The principle of tying capital standards to estimated risk is appropriate only if risk estimation techniques are sound and experience has revealed important limitations that need to be addressed. Consideration should be given to improved methods to identify and account for hidden credit concentrations, unduly optimistic assumptions about market liquidity risk, so called “pipeline” risk in originate-to-distribute business models, and noncontractual

exposures, such as those arising from sponsorship of off-balance-sheet vehicles and various types of investment funds.

Even improved techniques for estimating risk will have inherent limitations. Recognizing those limitations, capital standards can be made more practical and less procyclical, by expressing them in terms of wide operating ranges, rather than as minimum point estimates. Such an approach should encourage a buildup of capital during expansion periods, discouraging aggressive share buyback and dividend policies while permitting some reductions in times of stress. Regulators will need to encourage banks to internalize this discipline by requiring capital management policies to be tied to careful analysis of what stress scenarios imply about capital needs.

Recommendation 10:

- a. International regulatory capital standards should be enhanced to address tendencies toward procyclicality. Benchmarks for being well capitalized should be raised, given the demonstrable limitations of even the most advanced tools for estimating firmwide risk.
- b. These benchmarks should be expressed as a broad range within which capital ratios should be managed, with the expectation that, as part of supervisory guidance, firms will operate in the upper end of such a range in periods when markets are exuberant and tendencies for underestimating and underpricing risk are great.
- c. The existing international definitions of capital should be reevaluated, looking toward close alignment on national definitions.
- d. Capital and risk disclosure standards should be reevaluated to provide a higher degree of transparency of a firm's risk appetite, its estimated needs for and allocation of economic capital, and its valuation practices.

11. Standards for Liquidity Risk Management

Two interrelated sets of liquidity strains have characterized the current financial crisis. One is the evaporation of active markets for assets apart from government securities with the consequence that price discovery in many markets became unreliable. The other is strains on funding, as reflected in the dislocations in the interbank funding markets and the virtual shutdown of term debt funding markets for even highly rated financial institutions. The extent of these strains suggests that enhanced risk-based capital standards are by themselves not a sufficient basis for ensuring financial stability. Standards are also needed for liquidity risk.

Stronger, more systematic measures need to be taken that build on the framework used for capital standards. A first step in this regard was taken in early 2008 with the Basel Committee's Principles for Sound Liquidity Risk Management.



Recommendation 11:

- a. Base-level liquidity standards should incorporate norms for maintaining a sizable diversified mix of long-term funding and an available cushion of highly liquid unencumbered assets. Once such standards are developed, consideration should be given to what is the preferred mix of senior and subordinated debt in bank capital structures.
- b. Supervisory guidance for liquidity standards should be based on a more refined analysis of a firm's capacity to maintain ample liquidity under stress conditions, including evaluation of the quality and effectiveness of its liquidity management policies and contingency funding plan.
- c. Liquidity disclosure standards, building on the suggested practices in the Basel Committee Principles, should complement the suggested improved disclosure practices for capital and risk profile information.

12. Fair Value Accounting

The current financial crisis has triggered an intense and often frustrating debate concerning the issues raised by strict application of fair value accounting (FVA) rules to the financial statements of regulated financial institutions. In distressed, illiquid, virtually nonfunctioning markets such as have been witnessed, the limitations and unintended consequences of FVA rules have become apparent, seemingly contributing to uncertainties and distress. Some recent interpretative guidance regarding too-rigid application of these rules has been viewed as helpful. But application of that guidance has been uneven across institutions and national regimes and has caused further divergence, rather than convergence, between U.S. and International Accounting Standards, without resolving the core issues.

Apart from the current difficulties in determining market prices, there is an underlying tension between the business purposes served by regulated financial institutions—particularly those in which the basic function is to intermediate credit and liquidity risk by funding illiquid loans by means of demand or short-term deposits—and the interests of investors and creditors to have the best possible current information on the immediate market value of assets and liabilities. That tension has also been reflected historically in different approaches favored by prudential and security regulators.

The direction until recently has been to seek to resolve that tension by forcing as much of the accounting and valuation of all assets and liabilities as possible into an accounting model designed and developed to address market values of liquid tradeable instruments. The extent to which this represents a “forced fit” has become very apparent in the current crisis. One dramatic result has been the ability of distressed institutions to increase their reported earnings by marking to market of certain of their own liabilities as the credit risk on their debt has increased. Another problem is valuations on illiquid assets that sometimes

have limited relationship to expected discounted cash flows.

The way forward is not to abandon appropriate consideration of fair value principles but to seek a better principles-based balance between the legitimate needs of investors for useful current financial information and the business model of the regulated financial institutions.

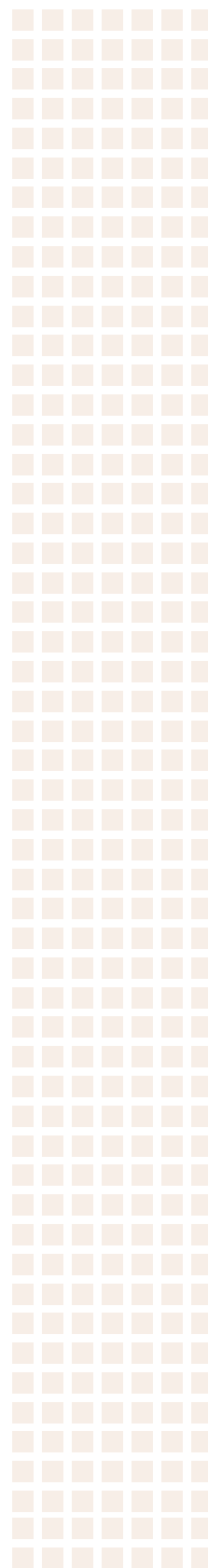
A starting point is to recognize the relevance for sound internal risk management of tracking the best available information on the changes in value of a financial firm's assets and liabilities. Market pricing validated, if possible, by independent appraisal is one important requirement. But it is not necessarily the only one for evaluating risk and profitability in the absence of market liquidity and when the intrinsic value of continuing customer relationship is a relevant consideration.

Another practical consideration is the responsibility of prudential regulators and supervisors to themselves monitor, evaluate, and discipline valuation practices. Their concerns must be to judge the nature and extent of the risks involved and to consider the adequacy of reserve provisions to absorb potential losses, matters that cannot be fully encompassed in marking to market in all circumstances.

In sum, the accounting principles and approaches applicable to regulated financial institutions whose primary purpose is to intermediate credit and liquidity risk needs to be better aligned with the firm's business model. A pure mark-to-market accounting model is generally preferred for trading activities and most elements of market risk. Variations on the current intent-based accounting model applicable to banking organizations are a better place to start for these types of intermediaries. More realistic guidelines for addressing valuation issues for illiquid investments in these types of portfolios—including guidance on how to treat intent-based changes and movements in these instruments between accounts—is also a better starting point for firms with this business model. Rigor in the standards for alternative methods of valuation (including impairments) and for evaluating intent (and ability to carry that intent through) is essential to serve investor needs.

More generally, there can and should be an improved level of disclosure and transparency around regulated firms' risk profiles, risk reporting, and valuation practices. The more flexibility regulated firms and their regulators have to apply appropriate reasonable valuation practices to risk portfolios, the greater is the burden on them to provide full, fair, and timely disclosures of information related to their valuation practices.

Finally, safety and soundness considerations require that regulated firms maintain full and adequate reserves for specific expected credit losses over the life of credit exposures, and general valuation reserves to deal with cyclical and liquidity risks in relevant parts of their portfolios, including derivative portfolios. Tensions in this regard between accounting rules and safe and sound banking practices should be resolved in a way that promotes safety and soundness, with full and complete transparency and disclosure of resulting reserves.



Recommendation 12:

- a. Fair value accounting principles and standards should be reevaluated with a view to developing more realistic guidelines for dealing with less-liquid instruments and distressed markets.
- b. The tension between the business purpose served by regulated financial institutions that intermediate credit and liquidity risk and the interests of investors and creditors should be resolved by development of principles-based standards that better reflect the business model of these institutions, apply appropriate rigor to valuation and evaluation of intent, and require improved disclosure and transparency. These standards should also be reviewed by, and coordinated with, prudential regulators to ensure application in a fashion consistent with safe and sound operation of such institutions.
- c. Accounting principles should also be made more flexible in regard to the prudential need for regulated institutions to maintain adequate credit-loss reserves sufficient to cover expected losses across their portfolios over the life of assets in those portfolios. There should be full transparency of the manner in which reserves are determined and allocated.
- d. As emphasized in the third report of the CRMPG, under any and all standards of accounting and under any and all market conditions, individual financial institutions must ensure that wholly adequate resources, insulated by fail-safe independent decision-making authority, are at the center of the valuation and price verification process.



PART 5

*Improving Transparency and
Incentives, and Strengthening
the Financial Infrastructure*



CORE RECOMMENDATION IV

Financial markets and products must be made more transparent, with better-aligned risk and prudential incentives. The infrastructure supporting such markets must be made much more robust and resistant to potential failures of even large financial institutions.

13. Restoring Confidence in Securitized Credit Markets

Prior to the current crisis, a meaningful portion of the credit extension process had migrated away from traditional loan origination and retention by individual banks or other financial institutions that have direct knowledge of and relationships with borrowers, to one where financial institutions have relied on each other to originate loans that are then parceled out and shared among a broad group of otherwise unrelated entities. One consequence has been that the loss of confidence experienced during this crisis has extended beyond specific institutions to include a loss of confidence in entire sectors of the world's capital markets.

Prominent in this regard has been the complete drying up of new debt issuance in virtually all segments of the asset-backed securities markets. This has extended well beyond the markets for complex structured collateralized debt obligations (CDOs) and collateralized loan obligations (CLOs) to include so-called plain vanilla asset-backed receivables transactions.

The primary factors contributing to this loss of confidence have been the excessive complexity of these instruments and the lack of transparency that has characterized these markets. An additional contributing factor has been flaws exposed in the workings of the “originate-to-distribute” business model followed in the capital market units of virtually all large banking organizations. Those flaws include: (a) an erosion in credit underwriting standards, based on a transaction rather than a relationship and retention approach to credit risk; (b) concentrations of pipeline credit risk, based on overly optimistic assumptions regarding market liquidity and redistribution capabilities; and (c) retention of what turned out to be badly structured and grossly overrated tranches of structured products, in order to drive new deal flow. The extent to which the originate-to-distribute model will survive the present crisis is in question. What is clear is that it should not continue as a major element in finance without a concerted effort to remedy the flawed approaches. Some of the flaws can be addressed in the strengthening of regulatory capital and liquidity standards. Others need to be addressed as part of broader efforts to reduce risk and restore investor confidence in these markets.

The planned 2010 implementation of new international accounting standards for consolidation of various types of off-balance-sheet vehicles may impact securitization markets. Many of those vehicles—particularly so-called Structured Investment Vehicles (SIVs)—were created in part to get around existing accounting rules and regulatory capital standards.

Once these types of vehicles are forced back onto balance sheets and back into regulatory capital calculations, they may be phased out of existence, suggesting they served no sustainable economic purpose other than leveraged arbitrage of those rules.

In contrast to the above, off-balance-sheet trust vehicles that are used to support the issuance of traditional asset-backed securitizations must be viewed differently. Accounting standard setters should give further consideration to the usefulness of these types of trust structures being treated fully as on-balance-sheet items and what this might imply for the future functioning of markets for these types of asset-backed securities. A full discussion of how pending accounting changes are likely to impact the reporting and balance sheet treatment of these types of entities is beyond the scope of this report. (A useful review is provided on pages 38–52 of the CRMPG III report.) To the extent these vehicles also land back on financial institution balance sheets, there needs to be early resolution of the impact this may have on the usefulness of leverage ratios as a regulatory capital metric, and the potential uneven use of that metric across different national regulatory regimes.

Since most of the securitized capital markets have become international in scope, efforts to reopen them using new principles for transparency, risk underwriting, and accounting are best approached on a coordinated basis, particularly between authorities in the United Kingdom and the United States, where most of this activity has been centered.

Recommendation 13:

- a. **Market Supervision:** Extensive innovation in the capital markets and the rapid growth of securitization make it imperative that securitized and other structured product and derivatives markets be held to regulatory, disclosure, and transparency standards at least comparable to those that have historically been applied to the public securities markets. This may require that a broader range of markets be monitored, that there be adequate transparency as to transaction volumes and holdings across all products, and that both credit and leverage elements of each product be thoroughly understood and monitored.
- b. **Credit Underwriting Standards:** The healthy redevelopment of securitized credit markets requires a restoration of market confidence in the adequacy and sustainability of credit underwriting standards. To help achieve this, regulators should require regulated financial institutions to retain a meaningful portion of the credit risk they are packaging into securitized and other structured credit products.
- c. **Off-Balance-Sheet Vehicles:** Pending accounting rule changes for the consolidation of many types of off-balance-sheet vehicles represent a positive and needed improvement. It is important, before they are fully implemented, that careful consideration be given to how these rules are likely to impact efforts to restore the viability of securitized credit markets.



14. Rating Agency Reforms

Numerous issues and questions have been raised about problems arising from the pre-crisis operations of the Nationally Recognized Securities Ratings Organizations (NRSROs), particularly focusing on the ratings attached to complex securitized instruments. They include potential conflicts inherent in the issuer pay business models; limits on rating agency accountability; the usefulness of ratings that only rate credit default probabilities, to the exclusion of many other important risk factors; and excessive regulatory and investor reliance on NRSRO ratings. Issues have also been raised about the need for more competition and for better regulation.

In many financial institutions the number and quality of personnel devoted to credit analysis has failed to keep pace with the increased complexity of individual securities and portfolios of credit instruments. Over time, a focus on profitability within financial institutions has led many investors and intermediaries to “outsource” the screening of credits, and in many cases, the entire credit evaluation function, to the traditional ratings agencies.

Regulatory bodies have also relied on credit ratings from NRSROs as an important input in assessing the adequacy of net capital. In fact, credit ratings have become “hardwired” in a vast spectrum of rules, regulations, and investment guidelines affecting capital requirements, disclosure requirements, portfolio construction, and a host of other activities undertaken by banks, broker-dealers, corporations, and other issuers, pension funds, insurance companies, professional money managers, and other investors.

Unfortunately, however, the economic model that supports the rating agencies is driven not by these users but by issuers who select and pay for the ratings. There are no direct economic consequences for poor credit research or a rating that fails to predict an event of default, because the payer, the issuer, is not harmed in either event. Many issuers are believed to have “shopped” among the traditional providers for higher ratings, lending a perverse negative consequence to regulatory attempts to increase competition.

In addition, the rating agencies are not held legally accountable for the quality of their work. Since there is no contractual relationship between those who rely on ratings (investors) and the providers of ratings, there is no legal recourse. The agencies have, to date, escaped accountability for the quality of their ratings in the courts. In the United States they have successfully argued that their ratings/opinions are subject to protection under the First Amendment.

A model whereby credit research and summary ratings are paid for by investors rather than issuers has been used at times in the past and would be superior to the current model. Some subscription models for credit research and summary ratings have begun to emerge. However, the current models make it difficult for providers to be paid based on value added, both because they have to compete with the “free” ratings provided by the traditional issuers, and because it is difficult for them to discover and monitor how extensively

their intellectual property is being deployed. Consideration ought to be given to alternative approaches.

While there has been substantial innovation in the development of structured products rated by the traditional agencies, there has been little innovation in the measurement techniques incorporated in the ratings themselves, including risk measures related to liquidity, volatility, spread risk, and other risk factors relevant to market valuations.

Although many practice changes have been announced and/or proposed by the NRSROs, the European Commission, and the Securities and Exchange Commission (SEC), it is not clear that these changes go far enough to address the underlying incentive problems. The three-part recommendation set out below is intended to address more directly the need to improve the alignment of incentives for the three parties to the rating process—the issuer, the investor, and the rating service provider.

Recommendation 14:

Regulatory policies with regard to NRSROs and the use of ratings should be revised, preferably on an internationally coordinated basis, to achieve the following:

- a. Users of risk ratings, most importantly regulated users, should be encouraged to restore or acquire the capacity for independent evaluations of the risk of credit products in which they are investing.
- b. Risk ratings issued by the NRSROs should be made more robust, to reflect the risk of potential valuation losses arising not just from default probabilities and loss in the event of default, but also from the full range of potential risk factors (including liquidity and price volatility).
- c. Regulators should encourage the development of payment models that improve the alignment of incentives among the providers of risk ratings and their clients and users, and permit users to hold NRSROs accountable for the quality of their work product.

Infrastructure Developments

The events of 2008 have underscored the importance of a strong infrastructure for the financial system—one that keeps pace with the innovations and new markets that are part of modern finance. As Federal Reserve Board Chairman Ben Bernanke has pointed out, there are both “hardware” elements (that is, systems for execution, clearing and settlement, and so forth) and “software” elements (that is, statutory, regulatory, and contractual frameworks) to the infrastructure. Significant weaknesses have been exposed in both these aspects of the system’s infrastructure.

The final three recommendations that follow cover three areas for infrastructure improvement: OTC market changes, legal resolution mechanisms for financial institutions, and infrastructure in support of transparency in the markets for structured products.



15. Oversight of Credit Default Swaps (CDS) and Over-the-Counter (OTC) Markets

This crisis has exposed serious shortcomings in the infrastructure in support of the OTC derivatives markets. While some of those shortcomings may be viewed as conduct of business or market integrity issues, several problems have reached a scale that has raised systemic disruption issues. These problems include trade confirmation backlogs, lack of transparency on transaction reporting and pricing, contract closeout procedures, valuation practices and collateral disputes, and direct and indirect counterparty credit issues. Most of these issues either do not arise or are generally well managed within the exchange-based derivative markets.

Under pressure from various regulatory bodies, the leading firms in these markets have been working closely on a comprehensive program to address these infrastructure weaknesses. Prominent within that program are efforts to establish a central counterparty clearing (CCP) arrangement for the credit derivatives market and coordinated efforts to greatly

BOX 4 Regulation of the OTC Derivatives Markets

The following five points outline the nature and scope of proposed regulation of the over-the-counter (OTC) derivatives markets.

1. The appropriate national regulator should have the authority to promulgate rules applicable to market participation to promote sound practices and mitigate systemic risk in relation to credit default swaps (CDSs) and other OTC derivatives, including rules regarding sound risk management practices, trade reporting and confirmation standards, appropriate counterparty collateral requirements, contract closeout practices, and other measures needed to achieve market transparency.
2. Persons subject to regulation would include: those engaged in making two-sided markets in CDS or other OTC derivatives or who are engaged in the business of providing credit protection through CDS and whose activities reach a systemically significant threshold (to be established by the regulator), nonintermediaries whose OTC derivatives portfolios reach a systematically significant threshold (to be established by the regulator), and an OTC derivatives clearinghouse.
3. A professional intermediary in OTC derivatives would be required to be already regulated as a bank or must register with the regulator as a professional intermediary.
4. The regulator should promulgate rules requiring the reporting of large positions in OTC derivatives and related large counterparty credit exposure by both intermediaries and nonintermediaries.
5. The regulator should promulgate rules with respect to multilateral clearing organizations that clear OTC derivatives transactions other than on a securities or futures exchange to ensure the financial integrity of such clearing organizations and to mitigate systemic risk, promote reliable clearance and settlement, sound risk management practices, and market transparency.

reduce the gross size of outstanding contracts through bilateral compression arrangements. Significant progress has been made on these fronts. Further progress toward standardization and use of CCP mechanisms should be encouraged, if need be with regulatory capital requirements that bear more heavily on instruments that are not cleared through a CCP.

While these efforts may well result in adequate solutions to the most pressing existing problems, the broader policy questions regarding the appropriate regulatory status of these markets remain open. For most of the past 30 years, the markets developed in something of a regulatory vacuum, being regarded legally as neither securities nor futures contracts. Innovations were widespread and the markets grew explosively, suggesting that, beyond serving a valuable risk transfer function, a large speculative element has emerged.

As these markets have grown in complexity and size to dwarf the very cash markets to which they are related, the scale of infrastructure, credit, valuation, and transparency problems have loomed large. Pressure on central banks and other regulators to deal with these problems has grown.

It has long been recognized that the very same economic risk can be taken on or transferred by a combination of securities, futures contracts, or OTC derivatives. Yet, depending on the instrument used, vastly different rules, oversight arrangements, and infrastructure support mechanisms apply. While this may have made public policy sense when the OTC derivatives markets were in their early stages of development, the justification no longer exists. The time has come to harmonize standards and practices across these instrument markets. The time has also come to move beyond moral suasion and enlightened market self-interest to ensure that market practices develop in a timely, healthy, and comprehensive fashion. A possible system of regulation should include the elements listed in Box 4.

Recommendation 15:

- a. Much-needed planned improvements to the infrastructure supporting the OTC derivatives markets should be further supported by legislation to establish a formal system of regulation and oversight of such markets.
- b. Given the global nature of the market, it is essential that there be a consistent regulatory framework on an international scale, and national regulators should share information and enter into appropriate cooperative arrangements with authorities of other countries responsible for overseeing activities.

16. A Resolution Mechanism for Financial Institutions

Market discipline works best in a system in which failures can happen without being a source of major disruption and contagion. That can only happen with large, complex financial firms if the infrastructure and related market mechanisms that have to operate in the

face of failures are robust, transparent, and permit timely but not forced actions on the part of creditors and other counterparties to protect their interest.

In the United States, existing legal mechanisms for managing bank failures, while not perfect, have proven to be workable. The problems have arisen in the context of potential and actual failures of large non-bank financial institutions. Specifically, the intervention to prevent the failure of Bear Sterns, the bankruptcy filings of Lehman Brothers, and other interventions demonstrate that there is a need to establish an effective failure resolution regime for large non-bank financial institutions. Part of that can be addressed by improvements to the infrastructure of the OTC derivatives markets. Part of it can also be addressed by closing the gaps in consolidated prudential oversight of large regulated non-bank financial institutions. But to be fully effective, the legal regimes that operate once failure is triggered should be modified, with a view to placing primary importance on the capacity of the authorities to take actions to protect the health of the system. A related concern is the general framework for handling qualified financial contracts in the United States, which must be reconsidered in light of recent events.

In some countries, a legal framework to provide for the orderly closing of regulated banks is not yet fully in place, let alone a framework for systemically significant non-bank financial institutions. A desirable framework should provide for: (a) continuity of operations and service access for depositors and other clients, (b) appropriate discretion for receivers for managing payment priorities, (c) discretion to impose cost appropriately within the capital structure and on executive management to reduce moral hazard, and (d) appropriate financial flexibility for the regulator/receiver to provide for timely transfer of financial assets and liabilities and prompt access of clients to properly segregated assets and accounts.

A further complication that must be considered—both in the United States and other jurisdictions—relates to a potential failure of a large, leveraged hedge fund or group of related funds, where the funds in question are domiciled in an offshore center. The bankruptcy and governance regimes of such centers may be at odds with the public interest of the countries in whose markets the funds actually operate in terms of containing the impact of failures on the system. Once such funds and managers are brought under a formal regulatory system, the appropriate national regulator should require an analysis of this issue for the largest funds. The regulator should have the authority to require the manager of the funds in question to modify existing legal arrangements to provide for an acceptable legal regime for governance and potential bankruptcy liquidations.

Recommendation 16:

- a. In countries where this is not already the case, a legal regime should be established to provide regulators with authority to require early warning, prompt corrective actions, and orderly closings of regulated banking organizations, and other systemically

significant regulated financial institutions. In the United States, legislation should establish a process for managing the resolution of failed non-depository financial institutions (including non-bank affiliates within a bank holding company structure) comparable to the process for depository institutions.

- b. The regime for non-depository financial institutions should apply only to those few organizations whose failure might reasonably be considered to pose a threat to the financial system and therefore subject to official regulation.
- c. A regulatory body having powers comparable to those available for the resolution of banking institutions should be empowered to act as a receiver or conservator of a failed non-depository organization and to place the organization in liquidation or take action to restore it to a sound and solvent condition.
- d. The special treatment accorded to various forms of financial contracts under current U.S. law should be examined in light of recent experience, with a view toward resolving claims under these contracts in a manner least disruptive to the financial system.

17. Improving Transparency of Structured Product Markets

Disclosure standards in asset-backed and other structured fixed-income markets need to be reexamined and enhanced. Public interest in ensuring adequate disclosure to the investors in the private or wholesale markets for asset-backed and other structured fixed-income products should be recognized by regulators. At present, information that is likely to be significant is not generally available, and this needs to be addressed.

Once appropriate new disclosure standards have been agreed, this information should be provided in a manner that is comparable and facilitates analysis over time and across transactions. Satisfying this objective will require that information be presented in a more consistent and structured format than is currently the case. At present, financial information for corporate issuers is provided in a substantially structured manner under the content and presentation requirement of generally accepted accounting principles. However, there are no analogous content and presentation requirements for asset-backed and other structured products.

Recommendation 17:

- a. The disclosure and dissemination regime for asset-backed and other structured fixed-income financial products (including securities and other financial products) in the public and private markets should be enhanced.
- b. The appropriate national regulator should, in conjunction with investors, determine what information is material to investors in these products and should consider enhancing existing rules or adopt new rules that ensure disclosure of that information, for both asset-backed and synthetic structured products.



- c. The appropriate national regulator should condition transactions in the private and wholesale markets on satisfaction of appropriate information disclosure standards.

18. Sharing Market Activity and Valuation Information

Public policy considerations have generally supported the importance of competing channels for trading execution in financial markets subject to some basic minimum public market standards. Exchange-based execution mechanisms, and broadly comparable electronic execution facilities, are typically characterized by high degrees of transparency and price discovery. Lesser standards apply in various segments of the over-the-counter markets, in some cases to such a degree that the markets are better described as opaque rather than transparent.

Recommendation 18:

Efforts to restore investor confidence in the workings of these markets suggest a need to revisit evaluations of the costs and benefits of infrastructure investments that would facilitate a much higher level of transparency around activity levels, traded prices, and related valuations. Part of the costs of such changes is the impact on firm-specific concerns regarding the private nature of their market activity. These concerns, and direct investment costs, need to be weighed against the potential benefits of higher levels of market transparency.



PART 6

Concluding Comment



In the year ahead, policymakers will be faced with an extraordinary set of challenges. The financial crisis has yet to fully run its course. Financial markets and institutions have yet to reengage in a healthy process of risk intermediation. Real economies around the world are experiencing sharp contraction, which is likely to lead to additional credit defaults. Governments and central banks are stretching to their limits with programs to stabilize both financial systems and real economies.

Initiatives to address these immediate challenges must take precedence over even the most pressing agendas for financial regulatory reform. Moreover, until the full costs of the current crisis are known—including the financial costs from its economic fallout—there will not be clarity on the extent of needed reforms and a sensible timetable for implementing them and for rolling back of greatly extended safety nets.

The views and recommendations set forth here represent an assessment, at one particular point in the crisis, as to the needed elements of a comprehensive financial reform plan. These suggestions focus primarily on financial stability considerations and do not cover in any detail other potential needed changes in business practice, in market or administrative structure, or in competition policies.

This report should be read in combination with the prior extensive private sector and public sector reform proposals referred to in our report. Policymakers should have an extensive set of proposals for framing the issues involved in the needed comprehensive overhaul of the national and international financial systems and suggesting appropriate reform. These reforms are likely to be more extensive and important than any since the Great Depression.

APPENDIX

LIST OF RECOMMENDATIONS

CORE RECOMMENDATION I

Gaps and weaknesses in the coverage of prudential regulation and supervision must be eliminated. All systemically significant financial institutions, regardless of type, must be subject to an appropriate degree of prudential oversight.

Prudential Regulation and Supervision of Banking Organizations

Recommendation 1:

- a. In all countries, the activities of government-insured deposit-taking institutions should be subject to prudential regulation and supervision by a single regulator (that is, consolidated supervision). The largest and most complex banking organizations should be subject to particularly close regulation and supervision, meeting high and common international standards.
- b. Large, systemically important banking institutions should be restricted in undertaking proprietary activities that present particularly high risks and serious conflicts of interest. Sponsorship and management of commingled private pools of capital (that is, hedge and private equity funds in which the banking institutions own capital is commingled with client funds) should ordinarily be prohibited and large proprietary trading should be limited by strict capital and liquidity requirements. Participation in packaging and sale of collective debt instruments should require the retention of a meaningful part of the credit risk.
- c. In general, government-insured deposit-taking institutions should not be owned and controlled by unregulated non-financial organizations, and strict limits should be imposed on dealings among such banking institutions and partial non-bank owners.
- d. To guard against excessive concentration in national banking systems, with implications for effective official oversight, management control, and effective competition, nationwide limits on deposit concentration should be considered at a level appropriate to individual countries.

Consolidated Supervision of Non-Bank Financial Institutions

Recommendation 2:

- a. For those countries lacking such arrangements, a framework for national-level consolidated prudential regulation and supervision over large internationally active insurance companies should be established.



- b. An appropriate prudential regulator should be designated for those large investment banks and broker-dealers that are not organized as bank holding companies.

Money Market Mutual Funds and Supervision

Recommendation 3:

- a. Money market mutual funds wishing to continue to offer bank-like services, such as transaction account services, withdrawals on demand at par, and assurances of maintaining a stable net asset value (NAV) at par should be required to reorganize as special-purpose banks, with appropriate prudential regulation and supervision, government insurance, and access to central bank lender-of-last-resort facilities.
- b. Those institutions remaining as money market mutual funds should only offer a conservative investment option with modest upside potential at relatively low risk. The vehicles should be clearly differentiated from federally insured instruments offered by banks, such as money market deposit funds, with no explicit or implicit assurances to investors that funds can be withdrawn on demand at a stable NAV. Money market mutual funds should not be permitted to use amortized cost pricing, with the implication that they carry a fluctuating NAV rather than one that is pegged at US\$1.00 per share.

Oversight of Private Pools of Capital

Recommendation 4:

- a. Managers of private pools of capital that employ substantial borrowed funds should be required to register with an appropriate national prudential regulator. There should be some minimum size and venture capital exemptions from such registration requirement.
- b. The prudential regulator of such managers should have authority to require periodic regulatory reports and public disclosures of appropriate information regarding the size, investment style, borrowing, and performance of the funds under management. Since introduction of even a modest system of registration and regulation can create a false impression of lower investment risk, disclosure, and suitability standards will have to be reevaluated.
- c. For funds above a size judged to be potentially systemically significant, the prudential regulator should have authority to establish appropriate standards for capital, liquidity, and risk management.
- d. For these purposes, the jurisdiction of the appropriate prudential regulator should be based on the primary business location of the manager of such funds, regardless of the legal domicile of the funds themselves. Given the global nature of the markets in which such managers and funds operate, it is imperative that a regulatory framework be applied on an internationally consistent basis.

Government-Sponsored Enterprises (GSEs)

Recommendation 5:

- a. For the United States, the policy resolution of the appropriate role of GSEs in mortgage finance should be based on a clear separation of the functions of private sector mortgage finance risk intermediation from government sector guarantees or insurance of mortgage credit risk.
- b. Governmental entities providing support for the mortgage market by means of market purchases should have explicit statutory backing and financial support. Hybrids of private ownership with government sponsorship should be avoided. In time, existing GSE mortgage purchasing and portfolio activities should be spun off to private sector entities, with the government, if it desires, maintaining a capacity to intervene in the market through a wholly owned public institution.

CORE RECOMMENDATION II

The quality and effectiveness of prudential regulation and supervision must be improved. This will require better-resourced prudential regulators and central banks operating within structures that afford much higher levels of national and international policy coordination.

Regulatory Structure

Recommendation 6:

- a. Countries should reevaluate their regulatory structures with a view to eliminating unnecessary overlaps and gaps in coverage and complexity, removing the potential for regulatory arbitrage, and improving regulatory coordination.
- b. In all cases, countries should explicitly reaffirm the insulation of national regulatory authorities from political and market pressures and reassess the need for improving the quality and adequacy of resources available to such authorities.

Role of the Central Bank

Recommendation 7:

- a. Where not already the case, central banks should accept a role in promoting and maintaining financial stability. The expectation should be that concerns for financial stability are relevant not just in times of financial crisis, but also in times of rapid credit expansion and increased use of leverage that may lead to crises.
- b. In countries where the central bank is not the prudential regulator, the central bank should have: (i) a strong role on the governing body of the prudential and markets



- regulator(s); (ii) a formal review role with respect to proposed changes in key prudential policies, especially capital and liquidity policies and margin arrangements; and (iii) a supervisory role in regard to the largest systemically significant firms, and critical payment and clearing systems.
- c. A sharp distinction should be maintained between those regulated banking organizations with normal access to central bank liquidity facilities and other types of financial institutions whose access, if any, should be limited to extreme emergency situations of critical systemic importance.
 - d. Central bank emergency lending authority for highly unusual and exigent circumstances should be preserved, but should include, by law or practice, support by appropriate political authorities for the use of such authority in extending such credit to non-bank institutions.
 - e. Central bank liquidity support operations should be limited to forms that do not entail lending against or the outright purchase of high-risk assets, or other forms of long-term direct or indirect capital support. In principle, those forms of support are more appropriately provided by directly accountable government entities. In practice, to the extent the central bank is the only entity with the resources and authority to act quickly to provide this form of systemic support, there should be subsequent approval of an appropriate governmental entity with the consequent risk transfer to that entity.

International Coordination

Recommendation 8:

- a. National regulatory authorities and finance ministers are strongly encouraged to adapt and enhance existing mechanisms for international regulatory and supervisory coordination. The focus of needed enhancements should be to: (i) better coordinate oversight of the largest international banking organizations, with more timely and open information sharing, and greater clarity on home and host responsibilities, including in crisis management; (ii) move beyond coordinated rule making and standard setting to the identification and modification of material national differences in the application and enforcement of such standards; (iii) close regulatory gaps and raise standards, where needed, with respect to offshore banking centers; and (iv) develop the means for joint consideration of systemic risk concerns and the cyclicity implications of regulatory and supervisory policies. The appropriate agencies should strengthen their actions in member countries to promote implementation and enforcement of international standards.
- b. Given the recurring importance of excessive leverage as a contributing factor to financial disruptions, and the increasingly complex ways in which leverage can be employed on and off balance sheets, prudential regulators and central banks should

collaborate with international agencies in an effort to define leverage and then collect and report data on the degree of leverage and maturity and liquidity mismatches in various national systems and markets.

- c. To the extent new international regulatory organizations are ultimately needed, the initial focus should be on developing more formal regional mechanisms, such as in the European Union, but with continued attentiveness to the global dimension of most significant financial markets.

CORE RECOMMENDATION III

Institutional policies and standards must be strengthened, with particular emphasis on standards for governance, risk management, capital, and liquidity.

Regulatory policies and accounting standards must also guard against procyclical effects and be consistent with maintaining prudent business practices.

Regulatory Standards for Governance and Risk Management

Recommendation 9:

Regulatory standards for governance and risk management should be raised, with particular emphasis on:

- a. Strengthening boards of directors with greater engagement of independent members having financial industry and risk management expertise;
- b. Coordinating board oversight of compensation and risk management policies, with the aim of balancing risk taking with prudence and the long-run interests of and returns to shareholders;
- c. Ensuring systematic board-level reviews and exercises aimed at establishing the most important parameters for setting the firm's risk tolerance and evaluating its risk profile relative to those parameters;
- d. Ensuring the risk management and auditing functions are fully independent and adequately resourced areas of the firm. The risk management function should report directly to the chief executive officer rather than through the head of another functional area;
- e. Conducting periodic reviews of a firm's potential vulnerability to risk arising from credit concentrations, excessive maturity mismatches, excessive leverage, or undue reliance on asset market liquidity;
- f. Ensuring that all large firms have the capacity to continuously monitor, within a matter of hours, their largest counterparty credit exposures on an enterprisewide basis and to make that information available, as appropriate, to its senior management, its board, and its prudential regulator and central bank;



- g. Ensuring industrywide acceptance of and action on the many specific risk management practice improvements contained in the reports of the Counterparty Risk Management Policy Group (CRMPG) and the Institute of International Finance.

Regulatory Capital Standards

Recommendation 10:

- a. International regulatory capital standards should be enhanced to address tendencies toward procyclicality. Benchmarks for being well capitalized should be raised, given the demonstrable limitations of even the most advanced tools for estimating firmwide risk.
- b. These benchmarks should be expressed as a broad range within which capital ratios should be managed, with the expectation that, as part of supervisory guidance, firms will operate at the upper end of such a range in periods when markets are exuberant and tendencies for underestimating and underpricing risk are great.
- c. The existing international definitions of capital should be reevaluated, looking toward close alignment on national definitions.
- d. Capital and risk disclosure standards should be reevaluated to provide a higher degree of transparency of a firm's risk appetite, its estimated needs for and allocation of economic capital, and its valuation practices.

Standards for Liquidity Risk Management

Recommendation 11:

- a. Base-level liquidity standards should incorporate norms for maintaining a sizable diversified mix of long-term funding and an available cushion of highly liquid unencumbered assets. Once such standards are developed, consideration should be given to what is the preferred mix of senior and subordinated debt in bank capital structures.
- b. Supervisory guidance for liquidity standards should be based on a more refined analysis of a firm's capacity to maintain ample liquidity under stress conditions, including evaluation of the quality and effectiveness of its liquidity management policies and contingency funding plan.
- c. Liquidity disclosure standards, building on the suggested practices in the Basel Committee Principles, should complement the suggested improved disclosure practices for capital and risk profile information.

Fair Value Accounting

Recommendation 12:

- a. Fair value accounting principles and standards should be reevaluated with a view to developing more realistic guidelines for dealing with less liquid instruments and distressed markets.
- b. The tension between the business purpose served by regulated financial institutions that intermediate credit and liquidity risk and the interests of investors and creditors should be resolved by development of principles-based standards that better reflect the business model of these institutions, apply appropriate rigor to valuation and evaluation of intent, and require improved disclosure and transparency. These standards should also be reviewed by, and coordinated with, prudential regulators to ensure application in a fashion consistent with safe and sound operation of such institutions.
- c. Accounting principles should also be made more flexible in regard to the prudential need for regulated institutions to maintain adequate credit loss reserves sufficient to cover expected losses across their portfolios over the life of assets in those portfolios. There should be full transparency of the manner in which reserves are determined and allocated.
- d. As emphasized in the third report of the CRMPG, under any and all standards of accounting and under any and all market conditions, individual financial institutions must ensure that wholly adequate resources, insulated by fail-safe independent decision-making authority, are at the center of the valuation and price verification process.

CORE RECOMMENDATION IV

Financial markets and products must be made more transparent, with better-aligned risk and prudential incentives. The infrastructure supporting such markets must be made much more robust and resistant to potential failures of even large financial institutions.

Restoring Confidence in Securitized Credit Markets

Recommendation 13:

- a. Market Supervision: Extensive innovation in the capital markets and the rapid growth of securitization make it imperative that securitized and other structured product and derivatives markets be held to regulatory, disclosure, and transparency standards at least comparable to those that have historically been applied to the public securities



markets. This may require that a broader range of markets be monitored, that there be adequate transparency as to transaction volumes and holdings across all products, and that both credit and leverage elements of each product be thoroughly understood and monitored.

- b. **Credit Underwriting Standards:** The healthy redevelopment of securitized credit markets requires a restoration of market confidence in the adequacy and sustainability of credit underwriting standards. To help achieve this, regulators should require regulated financial institutions to retain a meaningful portion of the credit risk they are packaging into securitized and other structured credit products.
- c. **Off-Balance-Sheet Vehicles:** Pending accounting rule changes for the consolidation of many types of off-balance-sheet vehicles represent a positive and needed improvement. It is important, before they are fully implemented, that careful consideration be given to how these rules are likely to impact efforts to restore the viability of securitized credit markets.

Rating Agency Reforms

Recommendation 14:

Regulatory policies with regard to Nationally Recognized Securities Rating Organizations (NRSROs) and the use of ratings should be revised, preferably on an internationally coordinated basis, to achieve the following:

- a. Users of risk ratings, most importantly regulated users, should be encouraged to restore or acquire the capacity for independent evaluations of the risk of credit products in which they are investing.
- b. Risk ratings issued by the NRSROs should be made more robust, to reflect the risk of potential valuation losses arising not just from default probabilities and loss in the event of default, but also from the full range of potential risk factors (including liquidity and price volatility).
- c. Regulators should encourage the development of payment models that improve the alignment of incentives among the providers of risk ratings and their clients and users, and permit users to hold NRSROs accountable for the quality of their work product.

The Oversight of Credit Default Swaps (CDS) and Over-the-Counter (OTC) Markets

Recommendation 15:

- a. Much-needed planned improvements to the infrastructure supporting the OTC derivatives markets should be further supported by legislation to establish a formal system of regulation and oversight of such markets.

- b. Given the global nature of the market, it is essential that there be a consistent regulatory framework on an international scale, and national regulators should share information and enter into appropriate cooperative arrangements with authorities of other countries responsible for overseeing activities.

A Resolution Mechanism for Financial Institutions

Recommendation 16:

- a. In countries where this is not already the case, a legal regime should be established to provide regulators with authority to require early warning, prompt corrective actions, and orderly closings of regulated banking organizations, and other systemically significant regulated financial institutions. In the United States, legislation should establish a process for managing the resolution of failed non-depository financial institutions (including non-bank affiliates within a bank holding company structure) comparable to the process for depository institutions.
- b. The regime for non-depository financial institutions should apply only to those few organizations whose failure might reasonably be considered to pose a threat to the financial system and therefore subject to official regulation.
- c. A regulatory body having powers comparable to those available for the resolution of banking institutions should be empowered to act as a receiver or conservator of a failed non-depository organization and to place the organization in liquidation or take action to restore it to a sound and solvent condition.
- d. The special treatment accorded to various forms of financial contracts under current U.S. law should be examined in light of recent experience, with a view toward resolving claims under these contracts in a manner least disruptive to the financial system.

Improving Transparency of Structured Product Markets

Recommendation 17:

- a. The disclosure and dissemination regime for asset-backed and other structured fixed-income financial products (including securities and other financial products) in the public and private markets should be enhanced.
- b. The appropriate national regulator should, in conjunction with investors, determine what information is material to investors in these products and should consider enhancing existing rules or adopt new rules that ensure disclosure of that information, for both asset-backed and synthetic structured products.
- c. The appropriate national regulator should condition transactions in the private and wholesale markets on satisfaction of appropriate information disclosure standards.

Sharing Market Activity and Valuation Information

Recommendation 18:

Efforts to restore investor confidence in the workings of these markets suggest a need to revisit evaluations of the costs and benefits of infrastructure investments that would facilitate a much higher level of transparency around activity levels, traded prices, and related valuations. Part of the costs of such changes is the impact on firm-specific concerns regarding the private nature of their market activity. These concerns, and direct investment costs, need to be weighed against the potential benefits of higher levels of market transparency.

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