Third Edition

# MANAGEMENT OF BANKING AND FINANCIAL SERVICES

Padmalatha Suresh | Justin Paul

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# MANAGEMENT OF BANKING AND FINANCIAL SERVICES

THIRD EDITION

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# FOREWORD

Mrs. Padmalatha Suresh and Dr Justin Paul have written an extremely useful book on banking. Banking industry has undergone far-reaching changes in the recent period as a result of the banking reforms initiated in 1991–92. Among other things, banking reforms focused on the deregulation of the interest rate structure, introduction of prudential norms and imparting greater competition by allowing new banks and by permitting private participation up to a limit in public sector banks. Even as banks are required to fulfill certain socio-economic goals, they have to remain viable and efficient.

The introduction of the various measures which formed part of the banking sector reforms has had an impact on the way banks perform their functions. Conformity to the new prudential norms requires that banks manage their liabilities and assets in ways different from those practiced earlier. With the deregulation of the interest rate structure, banks have to pay attention to the interest rate risk besides the usual credit risk. The change in the exchange rate regime calls for banks to pay attention to exchange rate risk. These and many other problems have been dealt with lucidly by the authors in this book. The authors are eminently suited to write a book of this type. They have an excellent academic background. The also have the practical experience of dealing with banking issues at various levels. The book fulfills a need and I am sure it will be welcomed by students of banking as well as executives in the banking industry.

**(C. Rangarajan)**
Chairman
Economic Advisory Council to the
Prime Minister
*and*
Former Governor
Reserve Bank of India

# PREFACE TO THE THIRD EDITION

*"My other piece of advice, Copperfield", said Mr Micawber, "you know. Annual income twenty pounds, annual expenditure nineteen nineteen six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery. The blossom is blighted, the leaf is withered, the god of day goes down upon the dreary scene, and—and, in short, you are for ever floored. As I am!"*
*[Charles Dickens, 'David Copperfield' (1849–1850 [1950]), Chapter 12, p. 185.]*

More winds of change have swept over national landscapes since our second edition. What began as a credit crisis in the banking industry fanned itself into a wildfire, smothering nations under the burden of debt. What was true for Mr Micawber was true for powerful sovereigns as well!

'Banks, regulators, governments, and the entire global financial system are still finding ways to deal with the after-shocks of the crisis, and to avert new ones in future.' This sentence from the second edition is still valid at the time of the third edition!

## What's New?

The financial crisis of 2007 had thrown 'risk management' into sharp relief. The sovereign crisis that soon followed and continues to this day in various countries had led to pronounced global economic slowdown. The third edition in its introductory chapter deals with the future of the banking industry in the context of the global financial and economic crisis that has taken its toll on sovereign powers. It has updated chapters on advanced topics on 'credit risk management' that discusses various models of credit risk measurement and management. 'Risk management', of course, occupies centre-stage, and risks faced by the banking industry from its investment (market risk), solvency (capital), interest rate volatility and adequate liquidity have to be measured and managed. All the chapters have been rigorously updated and revamped to help users of the book understand how these risks can be managed.

## How the book has been organized

With risk management in sharp focus, the book is reorganized to enable the modern banker, academician, or student to recognize risks in banking and financial services, and take decisions to achieve the most favourable risk-return trade-offs.

The book is divided into two major sections—'Management of Banks' and 'Management of Financial Services'. Chapter 1 is an introduction to the changing dynamics of one of the most regulated industries in the world. Chapters 2 to 12 examine various facets of managerial and risk management aspects of banking in detail. The remaining chapters—13 to 23—deal with management of financial services that banks offer. Wherever relevant, aspects of financial markets, co-banking institutions and legal and regulatory reforms impacting banking and financial services have been highlighted.

## New features in this edition

- All chapters have been substantially updated and revised. Portions of some chapters have been completely rewritten to make them contemporary.
- New chapters have been added to address contemporary issues in the industry.
- More case studies and live examples have been provided in most chapters.
- Additional problems and research questions have been added to many chapters to provide students the opportunity to work with data and circumstances that would help them understand basic concepts better.
- All web references have been provided for further research work by academics.
- More topics have been included for possible research by interested students.
- A notable feature of this book is that the topics presented in this book would be found in advanced textbooks on banking and finance. However, the explanations and illustrations are aimed at those with no basic knowledge of both banking and financial concepts. Most concepts are explained in simple terms with the aid of diagrams, figures, and simple worked out examples. The technical details/advanced concepts related to each chapter are provided as annexures.

In short, the book, written by practitioners turned consultants/academicians, uniquely focuses on managerial issues in the banking and financial services industry. The book offers something unique for various types of target audiences. For those seeking knowledge of banking and financial services, the book explains basic concepts underlying the key banking

activities in very simple terms, and demonstrates how banks make financial decisions. For practitioners, the book enables building a sound conceptual foundation that will help them evaluate the overall organizational impact of decisions in their area of expertise, as well as provides tips to trade off between risk and return. Additionally, the book provides the big picture for managing the entire bank, since each chapter in the book is based on a strategic function of the bank, and addresses the basic concepts and application of these concepts in modern day management of banking and financial services. It is also interesting that the section on 'basic concepts' (presented as Section I) of each chapter has not undergone much change. This only implies that basic tenets and objectives of the banking and financial services industry have not changed. What do change are the applications of the basic concepts and their evolution to suit the environment in which they operate.

**Padmalatha Suresh**

**Justin Paul**

# PREFACE

Banking and financial services have been written about, debated and discussed so much over the years that one would wonder what unique contribution another book would have to make to the subject. A few years ago, even we would have found another book on this subject unnecessary. However, after teaching the subject for over six years at various management schools, we found that we could make a valuable contribution to the existing presentation of the subject by bringing together a distinctive conceptual and managerial flavor to understanding this dynamic industry. Our long years as practitioners in the industry also helped us tremendously in this venture.

Today, the winds of change are sweeping through the landscape of the banking and financial services in the country. The industry is simultaneously consolidating and diversifying in an increasingly deregulated environment. Multiple pressures fuelled by rapid globalization, competition nurtured by customer awareness and expectations of the highest levels of service aided by sophisticated tools and techniques of analysis, threats of security invasion and fraud in an era dominated by technology, demands for transparency and the regulators' overdrive to capital efficiency or asset quality, and the complexity of issues in managing financial institutions have grown exponentially. These issues have been addressed in this book.

This book is divided into six parts. Part I provides an overview of the environment in the banking and financial services sector. Part II describes the banking structure, dealing extensively with analysing banks' financial statements, sources and uses of bank funds, with a comprehensive coverage of the leading function. Part III details risk management in banks—credit risk, market risk, capital adequacy and risk measurement techniques. Part IV introduces international banking, while Part V deals with some contemporary issues in bank management such as high-tech banking, cash management and consolidation of the financial sector through mergers and acquisitions. Part VI and the appendices contain useful pedagogical tools—case studies and multiple-choice questions. This book is also special in that each chapter has sections on basic concepts and the application of these concepts in banking practice. An instructor's tool kit for teaching each chapter is also available on the Web site.

Through this book, we aspire to provide valuable takeaways for all segments of readers: for practitioners, the book will help evaluate the overall impact of their decisions on the organization as a whole, as also the critical trade-offs between risk and return; students will find the book useful to build a conceptual and practice-oriented foundation at one go; academics would find the book a useful reference guide.

We express our heartfelt gratitude to the Pearson Education team, without whom the book would have remained a dream.

**Justin Paul**

**Padmalatha Suresh**

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My humble gratitude to Dr C. Rangarajan, whose foreword to the first edition of this book placed me on cloud nine, and Dr A. H. Kalro, whose invitation to teach banking at IIM Kozhikode helped me begin this wonderful voyage.

As with the previous edition, I gratefully acknowledge the contribution of the entire Pearson team who patiently spent several painstaking hours over telephone and mail, to fine tune the book's quality and make it error free. Their commitment to this project, in spite of their busy schedule, has been commendable and exemplary.

**—Padmalatha Suresh**

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Jeomoan Kuriaon (Wells Fargo Bank)

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He has hands-on experience of working with two commercial banks before joining academic world and has been recognized as role model and achiever by *The Hindu, Manorama TV* and *Careers and Campuses* magazine. He has published over 20 papers in international journals and presented papers at the conferences organized/hosted by University of San Francisco, Fudan University-Shanghai, Indiana University of Pennsylvania, University of Stirling-UK, Asian Academy of Management, Waseda University-Tokyo in the recent past. He has also undergone a case writing training program organized by London Business School. He has also served as reviewer of research papers for Academy of International Business, USA, *International Journal of Commerce and Business*, *International Journal of Bank Marketing and Management Review*. He has widely traveled in over 50 countries. His Web site is www.drjustinpaul.com and contact email is profjust@gmail.com.

# CHAPTER ONE

# Managing Banking and Financial Services—Current Issues and Future Challenges

## CHAPTER STRUCTURE

Section I The Setting
Section II The Global Financial System—Current Issues
Section III The Indian Financial System—An Overview
Section IV The Indian Banking System—An Overview
Chapter Summary
Test Your Understanding
Topics for Further Discussion
Annexures I, II, III

## KEY TAKEAWAYS FROM THE CHAPTER

- Understand the present state of the global financial system.
- Understand the basic causes behind the global financial crisis of 2007.
- Learn how macro economic factors can affect financial stability.
- Learn how financial stability can be achieved through better regulation.
- Understand how the Indian financial system is organized.
- Understand the various types and characteristics of financial markets.
- Learn about the evolution of the Indian financial system.
- Understand the impact of the financial sector reforms.
- Take a look at the future challenges in the global and Indian financial systems.

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## SECTION I

## THE SETTING

*Leading up to Janet Yellen's January 6 confirmation vote, the Federal Reserve recently announced that it will taper back its bond-buying program, known as quantitative easing. This was encouraging news for inflation hawks, if barely so. Right now, the Fed buys $85 billion worth of mortgage-backed securities and Treasury bonds every month from financial firms. These firms, flush with cash from the Fed, then diffuse those dollars throughout the economy through loans and other financial activities. Going forward, the Fed will roll back its monthly purchases from $85 billion to $75 billion, or roughly 11 percent*.'

*...Ryan Young in The Washington Times, January 1, 2014*[1]

*'Japan's Central bank has promised to unleash a massive programme of quantitative easing—worth $1.4tn (£923bn) that will double the country's money supply—in a drastic bid to restore the economy to health and banish the deflation that has dogged the country for more than a decade.*

*As part of a new set of policies known as Abenomics, formulated by Japan's new prime minister Shinzo Abe, the Bank of Japan will buy ¥7tn (£46bn) of government bonds each month using electronically created money, with the aim of rekindling demand and pushing up prices and wages.'*

*...Heather Stewart in The Guardian, April 4, 2013*[2]

*'.... the Cypriot banks' high exposure to bad Greek debt meant that when Greece negotiated a debt write-off—the so-called 'haircut'—for its struggling financial institutes in February 2012, Cyprus took a severe blow.*

*Downgraded by the big rating agencies, Cypriot banks were cut off from the international financial markets and only kept alive through infusions from the European Central Bank (ECB). But the central bankers in Frankfurt threatened to withhold even these emergency funds unless Cyprus agreed to a deal, so Nicosia budged, accepting to raise around 5.8 billion euros to qualify for a 10 billion euro bailout.'*

*...Michael Steininger in The CS Monitor, March 29, 2013*[3]

*Welcome to the world—post the financial crisis that began in 2007-08*

## SECTION II

## THE GLOBAL FINANCIAL SYSTEM—CURRENT ISSUES

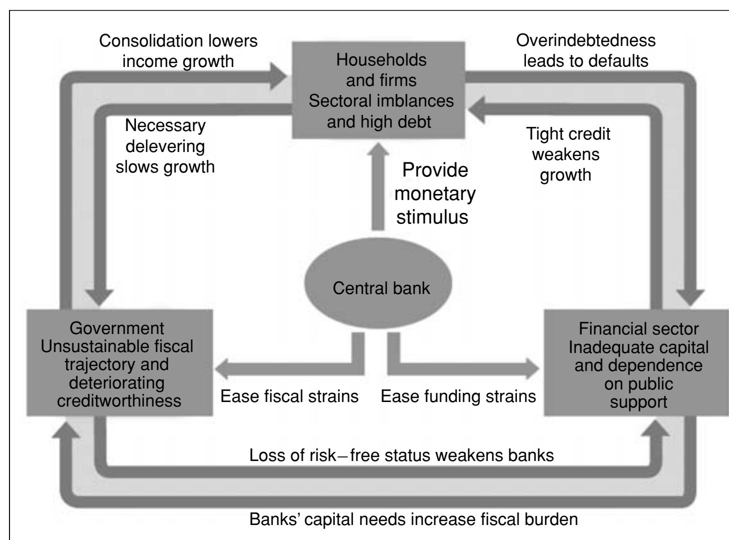
It has been nearly half a decade since the global financial crisis began. The global financial system continues to be under pressure, as are governments and key economic indicators of most countries. The global economies are in the grip of vicious cycles as depicted in Diagram 1.

While advanced economies at the centre of the financial crisis reel under high debt loads and marked slowdown, the emerging economies also face a slowdown in spite of rapid credit expansion or export led growth. The Bank for International Settlements (BIS, www.bis.org in its 82nd annual report), categorizes the ongoing challenges as those pertaining to (a) structural adjustment, (b) monetary and fiscal policy risks, and (c) financial reform.

Another paper from BIS[4] categorizes financial crises into banking, currency and sovereign debt crises. Recent research shows that during the period 1970 – 2011, currency crises occurred most frequently (218), followed by banking crises (147) and sovereign debt crises (66).

Since the first quarter of 2010, sovereign debt tensions and their impact on banks and economies have dominated. Sovereign debt crises have been more pronounced in the euro area. How is sovereign risk related to the banking and currency crises? Box 1.1 explains.

**DIAGRAM 1** VICIOUS CYCLES AND THE BURDEN ON CENTRAL BANKS.




*Source*: Bank for International Settlements, 82nd annual report, p. 8, Graph 1.1, accessed at www.bis.org

**BOX 1.1** THE BANKING CRISIS–SOVEREIGN CRISIS NEXUS EXPLAINED

The recent global financial crisis and the consequent deepening of the euro debt crisis clearly indicate the interdependencies between banks and sovereign risk. Several research studies have found a link between the fiscal and financial distress. Discussing the transmission channels during the fiscal and financial turmoil, Reinhart and Rogoff (2011) present a set of four stylized facts. First, private and public debt booms ahead of banking crises. Second, banking crises, both home-grown and imported, usually accompany or lead sovereign debt crises. Third, public borrowing increases sharply ahead of sovereign debt crises; moreover, it turns out that the government has additional 'hidden debts' (domestic public debt and contingent private debt). Fourth, the composition of debt shifts towards the short term before both debt and banking crises. Further, a default may take place if the financial crisis ignites a currency crash that impairs the sovereign's ability to repay foreign currency debt.

The bailout of banks by their respective countries during the recent global financial crisis has led to a shift of credit risk from the financial sector to national governments and led to an increase in sovereign risk (Acharya, *et al*, 2010).

However, historically, the transmission of distress has often moved from sovereign to banks with sovereign defaults triggering bank crises (Caprio and Honahan 2008). The anaemic economic growth combined with high debt-to-GDP ratio has led to frequent downgrades of the sovereign ratings of euro area [Greece, Ireland, Italy, Portugal and Spain (GIIPS)] countries by credit rating agencies. With an increase in sovereign debt risk, banks were also affected as they were the major holders of sovereign bonds.

There are multiple channels through which the increase in sovereign risk feeds into the banks' funding costs: (i) losses on holdings of government debt weaken banks' balance sheets, increasing their riskiness and making funding more costly and difficult to obtain; (ii) higher sovereign risk reduces the value of the collateral which banks can use to raise wholesale funding and central bank liquidity; (iii) sovereign downgrades generally flow through to lower ratings for domestic banks, increasing their wholesale funding costs and potentially impairing their market access; and (iv) a weakening of the sovereign reduces the funding benefits that banks derive from implicit and explicit government guarantees (CGFS-BIS 2011).

The interdependency between the sovereign and their banks can be clearly seen for euro area GIIPS countries, as both sovereign and bank risk (largest bank in the respective country), as measured by CDS spreads, tend to move together during the crisis.

The sovereign and banking stress increased as investors' concerns about the political situation in Greece and the implications of the difficulties experienced by the Spanish banking system were compounded by a perceived lack of cohesion among governments in upgrading the crisis management mechanisms in the euro area.

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Rogoff, Kenneth S and Carmen M. Reinhart, (2011), *A Decade of Debt*, NBER Working Paper 16827, National Bureau of Economic Research.

*Source:* Extract from RBI, Report on Trend and Progress of Banking in India 2011–12, Box II.2, pages 18, 19. The charts in this box have not been reproduced here.

## A Rewind to the Financial Crisis of 2007–08

Set in 2009, no discourse on 'banks', and more so, 'managing banks', can begin without reference to the credit market turmoil of 2007. The global crisis spared no country—developed or developing. With many countries' financial systems still grappling with the after-shocks of what began as a sub-prime lending crisis in the United States, it comes as no surprise that voluminous literature already exists on the causes of and lessons from the crisis, as well as remedial action taken by governments and regulators in various countries.

We will discuss the events that led to the crisis in detail elsewhere in this book. However, what is more important is the way forward. The financial system is the lifeline of any economy. It is therefore only natural that the 'future' of banking is hotly debated topic at not only banking forums but also at every congregation of professionals from various walks of life.

The term 'paradigm shift' is now being applied to banking as well. The question is—what does this 'shift' constitute? Will it mean jettisoning the old model of banking and adopting a completely new one? Or, would it

signify fine tuning existing banking practices so that 'crisis management' is strengthened through effective anticipation and preventive action?

## The Causes of the Crisis

Several arguments/theories/events have been cited as the causes of the 2007 crisis. But, there seems to be consensus on one possible over arching cause—lack of adequate attention from monetary authorities and regulators to certain factors that were shaping the global financial system when the crisis happened. Three groups of mutually reinforcing factors were then contributing to increased 'systemic' risk. They were as follows:

- Lower interest rates caused by worldwide macroeconomic imbalances over the last decade, inducing heightened risk taking and contributing to extremely high asset prices—the asset price 'bubble'.
- Changing structure of the financial sector and rapid pace of financial innovation over the last two decades, and the failure of 'risk management' to match up to the new demands.
- Failure to adequately regulate highly leveraged financial institutions.

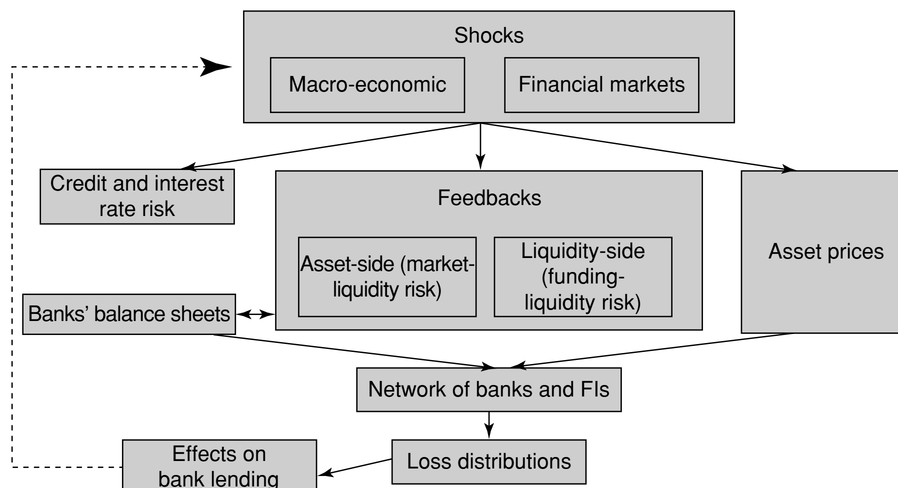
## Macroeconomic and Financial Stability—Understanding the Linkages

Studies of economic cycles show that 'booms' and 'busts' are typical of market-driven systems. 'Depressions', 'recessions' and 'market crashes' have all happened and passed into history, leaving behind painful memories, case studies and vital practical lessons to be learnt.

How are a country's macroeconomic developments and financial stability related? Figure 1.1[5] depicts the linkages between shocks in the real sectors of the economy and the financial sector.

Let us understand the figure using the example of the global crisis of 2007. The shock to the US economy began as an asset bubble in the real estate (housing) sector, caused by banks lending to sub-prime (less than creditworthy) borrowers.[6] The delinquency of such borrowers led to credit and interest rate risk[7] for banks involved in the lending. Since many of these banks, by this time, had 'securitized' the loans[8] and transferred the risks to other banks/entities, and the underlying asset prices had fallen drastically, liquidity in the market dried up. Funding available in the market also dwindled, partly because there was no liquidity and, also due to banks being wary of lending to other borrowers/banks which needed funding.[9] The high degree of interlinkages in the various markets led to a rapid transmission of the crisis from one segment to other segments. Ultimately, many banks 'and other institutions' balance sheets[10] were affected. Taken together, the combined effect of various risks reflected in the aggregate loss distribution, which can be mapped back to the adverse impact on bank lending and the economy.

**FIGURE 1.1** INTERRELATIONSHIPS BETWEEN MACROECONOMIC DEVELOPMENTS AND FINANCIAL STABILITY




*Source*: Haldane, Andrew; Hall, Simon and Pezzini, Silvia (2007). A New Approach to Assessing Risks to Financial Stability; Financial Stability, Paper No. 2; www.bankofengland.co.uk

In this case, since several banks and other institutions around the world were involved as 'buyers' or 'insurers' or 'traders' of credit risk, a number of other countries' financial systems were adversely affected. Hence, the United States sub-prime mortgage market triggered a credit market crisis at the global level, the depth of whose adverse effects are being estimated even in 2009–2010.

How do we define 'financial stability'? There is no single definition for financial stability (and the term 'systemic risk' which is used in tandem). Hence, the term takes on contextual meaning, signifying smooth functioning of the financial system, both under normal and stressed conditions.[11]

The recent credit crisis, like others before it, has thrown up several issues and challenges for banks and other financial institutions, as well as central banks and regulators. However, all stakeholders agree on one thing—recovery of the global financial system depends on restoration of 'TRUST'.

## The Role of 'Trust' in Financial Stability

The global crisis witnessed the crumbling of the very foundation of a sound financial system—TRUST.

There was a 'massive breakdown of trust across the entire financial system—trust in banks and non banks, trust in central banks and other regulators, trust in credit rating agencies, trust in investment advisors, trust in brokers, dealers and traders, and trust in the financial markets, if not in the market system itself'.[12]

The loss of trust, coupled with failure of banking behemoths and lack of transparency, led to great fear and uncertainty. Which were the banks/institutions that could withstand losses? Can the potential losses be estimated with certainty? Were there lurking risks in the system that could explode in the future? Frightening questions—with no reassuring answers—resulted in unprecedented panic. Banks that had liquidity, hoarded it. Banks that did not have liquidity faced doomsday, since they got no help from the distrusting markets. The financial markets nearly went into a deep freeze. Long-standing financial institutions that had appeared rock solid quietly folded up. Lack of trust had almost brought the entire chain of financial intermediation to a standstill.

## The Role of Regulation in Ensuring Financial Stability

The G20 Working Group on 'enhancing sound regulation and strengthening transparency' (Working Group I), in its report[13] dated 25 March 2009, has reiterated the paramount importance of robust financial regulation in each country based on effective global standards for financial stability in future. The report has acknowledged the role of regulation as the first line of defence against financial instability. It sums up the cause of the financial crisis: 'In hindsight, policy makers, regulators and supervisors in advanced countries did not act to stem excessive risk taking or to take into account the inter-connectedness of the activities of regulated and non-regulated institutions and markets'.

Experts have identified some of the areas that were given inadequate attention as the following:

a. *The 'perimeter' of regulation*. In deciding which institutions and practices should be regulated and to what extent, the regulators had overlooked that some institutions outside their purview were taking on excessive risks, and that some of these risks were not 'visible' or 'detectable'.

b. *Procyclical practices*. Booms in the economy lead to higher confidence levels both among borrowers and lenders. As a consequence, lenders become lax about credit standards and borrowers turn overconfident about the potential of projects they invest in. When the economy is on the downturn, banks become wary and tighten lending standards and pull back liquidity.

c. *Information gaps about risk and where they were distributed in the financial system*. This happened in the case of financially engineered products, where credit risk transfer was done in a distributed manner. Though the principle of 'structuring' was to transfer risk to those parties who could best bear them, the rapid increase in demand for such high-yielding products led to lower transparency. As a result, most sellers and the buyers of these products lacked adequate understanding of what they were selling or buying, thus exposing themselves to greater risks.

d. *Lack of cross-border information flow and co-operation among regulators in various countries*. There was no harmonization of national regulatory policies and legal frameworks in various countries, even though risks were being transferred across countries.

e. *Provision of liquidity by regulators* in the event of crisis.

It is, therefore, clear that the regulatory framework needs considerable strengthening. The stark lessons from the crisis will ensure that adequate regulation will be receiving significant attention in future.

## The Objectives of Financial Regulation

According to an IMF Working Paper,[14] there are two vital objectives of financial regulation, as depicted in Figure 1.2.

We have already seen how the failure of financial institutions can have a wider impact on financial markets and macroeconomic stability. However, even a weak financial system can have adverse effects on economic growth and stability. Individual banks or financial institutions would not be able to assess the overall economic impact of bank level business decisions. Hence, regulation is used to mitigate such systemic risks.

As seen in Figure 1.2, systemic risks can be macro or micro in nature. Both types of risks, in essence, are interrelated.

When risks taken by various banks/institutions in the economy have a correlated negative impact across other institutions, the financial system as a whole gets weakened and economic growth is adversely affected. This is macro systemic risk, and the credit crisis of 2007 is an example of this risk.

In micro-systemic risk, the failure of one bank or institution has an adverse impact on the financial system as a whole. For example, failure of one bank can cause a loss of confidence and trigger a run on other banks, even those that are fundamentally sound.

**FIGURE 1.2** OBJECTIVES OF FINANCIAL REGULATION

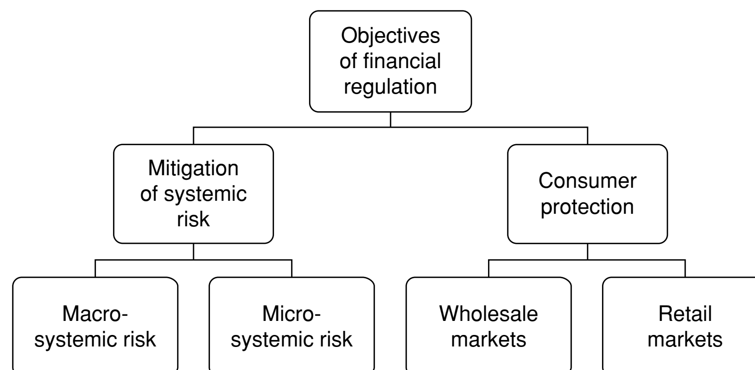
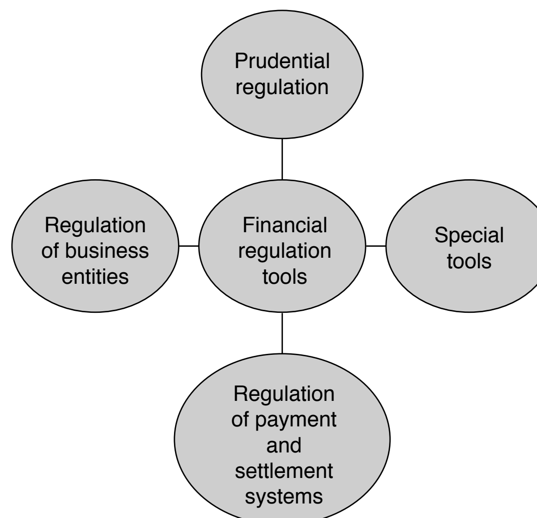



**FIGURE 1.3** TOOLS OF FINANCIAL REGULATION



How are the objectives of mitigating systemic risks and customer protection related and regulated? The following examples illustrate the facts:

- In financial markets, the sellers of financial products (say, deposit accounts or insurance services) have more information than the buyers (customers of banks, insurance, etc.). Hence, regulation is required to establish rules and procedures for disclosure of information or limit risk by placing a cap on the amount that can be invested in certain products.
- In retail markets, it is necessary for the regulator/regulation to ensure that the provider of financial services is in good financial health, since the payoff to the customers (*e.g*., repayment of deposits, insurance proceeds, and so on) is dependent on it.
- In wholesale markets, say in the case of securities, the sellers of securities have more information than the investors. Hence, more disclosures by way of information given in prospectuses or stiff penal clauses to restrain undesirable practices, such as insider trading are required. More transparency can be achieved through regulation.

According to the IMF paper, quoted above, financial regulation can be done using four broad tools (*see* Figure 1.3). These are as follows:

- Prudential regulation typically sets out regulatory prescriptions for maintaining capital or liquidity or credit quality. The regulation seeks proactive remedial action.[15]
- Specialized tools in the hands of central banks and other regulators are the role of 'lender of last resort'(LOLR) or deposit insurance.[16]
- Regulation of payment and settlement systems is vital for ensuring post-trade transactions in financial contracts are managed well.[17]
- Business regulation aims to regulate activities of financial market participants through regulation of trading activity and financial market products.[18]

## Financial Stability—the Over-arching Agenda for the Future

One of the key lessons from the crisis is that financial stability does not automatically follow price stability or macroeconomic stability. In an increasingly globalizing world, a threat to financial stability in any country could trigger a series of responses that jeopardize the financial stability of other countries. Hence, 'financial stability' will, in future, have to be looked at as an explicit objective, rather than an implicit objective of economic policy and growth.

A lot of discussion has already taken place at the highest levels in international forums, and these discussions are forming the basis for new or altered regulation or supervisory guidance. Some of the significant actions already taken include strengthening the Basel 2 capital framework,[19] developing global standards for liquidity risk management,[20] strengthening supervision of cross-border financial conglomerates, reviewing international accounting standards,[21] strengthening the functioning of credit rating agencies,[22] rationalizing compensation structures and extending the scope of regulation to cover non-banking financial institutions.[23] (See Box 1.2, for the role of non-banking financial institutions—also called 'shadow banking system' in the financial crisis.)

**BOX 1.2** ROLE OF THE 'SHADOW BANKING SYSTEM' IN THE FINANCIAL CRISIS

Internationally, the non-banking financial institutions are also termed 'other financial intermediaries' (OFI). They typically include, among others, pension funds, securities dealers, investment funds, finance, leasing and factoring companies and asset management companies. They can also include the less understood special investment vehicles (SIVs), conduits, money market funds, monolines, investment banks, hedge funds and other non-banking financial services.[24] Since many of these operations are opaque, these entities are sometimes categorized as part of a 'shadow banking system'.

In the run up to the financial crisis of 2007, many of these shadow banks, which were typically bank subsidiaries or associates, capitalized on regulatory gaps. They raised short-term funds in the market, such as 'commercial paper' and invested in illiquid, long-term assets, such as sub-prime mortgages or other SIVs. The danger with this approach was that if the assets failed to return cash flows (from repayments and interest), the short-term borrowings could not be repaid. The shadow banks, being outside the banking system, did not have access to the 'lender of last resort' protection from the central banks. Thus, if the market turned illiquid, these entities could become insolvent.

Unfortunately, the worst scenario materialized. The sub-prime assets failed to return cash flows and the shadow banks scrambled for liquidity to refinance the short-term liabilities. The liquidity in the market too, soon dried up and many of

these entities were forced to declare bankruptcy. The contagion spread to the parent banks as well, as the credit risk in sub-prime mortgages, and the market risk in structured products rapidly turned into a systemic liquidity risk. Since many international banks were involved in shadow banking activities, the US centred sub-prime crisis snowballed into a major global financial credit and liquidity crisis.

The Financial Stability Board (FSB) [25], in April 2012, defined shadow banking system as 'Credit intermediation involving entities and activities outside the regular banking system'.

At the Cannes Summit in November 2011, the G-20 leaders agreed to strengthen the oversight and regulation of the shadow banking system and endorsed the FSB's initial recommendations with a work plan to their further development in the course of 2012. The FSB has adopted a two-pronged approach. First, the FSB will enhance the monitoring framework by continuing its annual monitoring exercise to assess global trends and risks, with more jurisdictions participating in the exercise. Second, the FSB will develop recommendations to strengthen the regulation of the shadow banking system, wherever necessary, to mitigate the potential systemic risks.

In April 2012, the FSB in its report on shadow banking system to the G-20 leaders reviewed the progress made.

### Does India Have Shadow Banking System?

In India and certain other countries like Turkey, Indonesia, Argentina, Russia and Saudi Arabia, the non-banking financial assets remained below 20 per cent of GDP at the end of 2012. However, the sector showed rapid growth, though from a low base, in some of these jurisdictions, including India. In the Indian context, the Non-Banking Finance Companies (NBFCs) are regulated by the Reserve Bank and all types of Mutual Funds (MFs) are regulated by the Securities and Exchange Board of India (SEBI). As such, India does not have shadow banking entities, in the formal financial system with potential for creating systemic instability. However, a large number of non-bank financial entities function in the unorganized sector (unincorporated entities outside the purview of regulatory perimeter), whose collective size and profile of activities need to be gauged to ensure that they do not pose any threat to the 'trust'in and 'stability' of India's financial system.

*Source:* Various documents from RBI, FSB.

The encouraging signal emerging from global deliberations is the recognition that international co-operation is key to resolve crises of such proportion. The various working groups constituted by the G-20 have emphasized that future regulation and supervision must reinforce risk management capacity of financial institutions. Greater transparency and lower regulatory 'arbitrage' (defined later in this chapter) have also been insisted upon. A major outcome is the establishment of a new Financial Stability Board (FSB) to be operated by the International Monetary Fund (IMF), with strengthened mandate that includes all large countries of the world.

## SECTION III

## THE INDIAN FINANCIAL SYSTEM—AN OVERVIEW

### Financial Stability in India

The financial system of any country has two important segments—the financial markets and the financial intermediaries.[26]

The turmoil in the global financial system has triggered introspection and discussion on the stability of the Indian financial system. Some have termed the fact that India has not faced any financial crisis so far as a consequence of deregulation as 'remarkable', while others attribute it to the 'correctness of 'judgement' that reforms to global standards need to be adjusted to local conditions'.[27] The relative insulation of India could also appear 'fortuitous', since the credit derivatives market is in an embryonic stage and the originate-to-distribute model in India is not comparable to that in developed markets, or 'conservative', since regulatory guidelines on securitization do not permit immediate profit recognition or the reforms were not speeded up through bold and drastic steps as in other countries.

However, the fact remains that the Indian financial sector has matured since the financial reforms were instituted. What we see today is a reasonably sophisticated and robust system delivering a diverse range of financial services, efficiently and profitably. With deregulation, the operational and functional autonomy of financial institutions has increased and, so has their participation in various financial market segments in the face of heightened international competition. It is also moving towards the goal of financial inclusion by accelerating growth momentum while containing risk and emphasizing on 'financial stability'.

In order to understand the challenges and issues confronting, the Indian banking system in the present context, it is necessary to understand the structure and evolution of the Indian financial system.

One way of understanding the financial market structure is to look at its components. Table 1.1 classifies financial markets into broad components and lists their typical characteristics. The table also indicates the broad aspects of regulation in each market, as well as the depth of the market in India.

**TABLE 1.1** CHARACTERISTICS OF FINANCIAL MARKETS

| Type of Market | Purpose | Operators | Typical Regulator | Regulator in India | Depth of Market[28] in India |
|---|---|---|---|---|---|
| Money market. | Short-term finance | Banks, government, mutual funds, financial institutions, insurance companies and corporate companies. | Central bank | Reserve Bank of India (RBI) (under clause 45 (W) of RBI Amendment Act, 2006). | Reasonably deep |
| Capital market. | Long-term finance | Companies, banks, financial institutions, mutual funds and exchanges. | Capital market regulator | Securities and Exchange Board of India (SEBI)— under SEBI Act, 1992; Securities Contracts (Regulation) Act, 1956 and Depositories Act, 1996. | Equity markets and its related derivative segments are quite deep and liquid. But corporate bond market is quite shallow. |
| Foreign exchange market. | Foreign currency operations. | Companies, banks and authorized dealers (AD). | Central bank | RBI[29] | quite developed and deep. |
| Government securities market. | Short- and long-term finance. | Government, banks and primary dealers[30]. | Central bank | RBI[31] | Well-developed and deep. |
| Credit market | Short- and long-term finance. | Banks, financial institutions and non-banking financial institutions. | Central bank | RBI | Reasonably well-developed, except credit derivatives market. |

Table 1.2 outlines the typical instruments, their salient features, and some of issues to be resolved in each market.

**TABLE 1.2** TYPICAL FINANCIAL INSTRUMENTS IN INDIA—SALIENT FEATURES

| Market Type | Typical Instruments | Exchange Traded or OTC[32] | Typical Derivatives | Issues |
|---|---|---|---|---|
| Money market | Instruments[33] with maturities of one year or less:<br>• Inter-bank call money<br>• Market repo<br>• Collateralized borrowing and lending obligations (CBLO)<br>• Commercial paper (CP)<br>• Certificates of deposit (CD) | Electronic trading platforms for call, market repo, CBLO, OTC for call, CP, CD. Settlement over RTGS (Real time gross settlement) on electronic platform. | Derivative products—Interest rate swaps/forward rate agreements[34]. Trades in swap market OTC. Interest rate futures reactivated in August 2009, | 1. Little growth in medium-term money market.<br>2. Assessment with IOSCO[35] principles reveal existence of critical regulatory and accountability gaps. |
| Capital market | Equities and bonds | Operation of equity markets through stock exchanges. | Related derivatives | 1. Equity and derivative markets well-developed and functioning smoothly.<br>2. However, corporate bond market yet to take off.<br>3. The private placement segment is growing, but lacks transparency.<br>4. Overlap of responsibilities between Government and SEBI.<br>5. Tightened risk-management practices. |

(*Continued*)