

Understanding International Bank Risk

Andrew Fight



John Wiley & Sons, Ltd

Understanding International Bank Risk

Wiley Finance Series

Investment Risk Management

Yen Yee Chong

Understanding International Bank Risk

Andrew Fight

Global Credit Management: An Executive Summary

Ron Wells

Currency Overlay

Neil Record

Fixed Income Strategy: A Practitioner's Guide to Riding the Curve

Tamara Mast Henderson

Active Investment Management

Charles Jackson

Option Theory

Peter James

The Simple Rules of Risk: Revisiting the Art of Risk Management

Erik Banks

Capital Asset Investment: Strategy, Tactics and Tools

Anthony F. Herbst

Brand Assets

Tony Tollington

Swaps and other Derivatives

Richard Flavell

Currency Strategy: A Practitioner's Guide to Currency Trading, Hedging and Forecasting

Callum Henderson

The Investor's Guide to Economic Fundamentals

John Calverley

Measuring Market Risk

Kevin Dowd

An Introduction to Market Risk Management

Kevin Dowd

Behavioural Finance

James Montier

Asset Management: Equities Demystified

Shanta Acharya

An Introduction to Capital Markets: Products, Strategies, Participants

Andrew M. Chisholm

Hedge Funds: Myths and Limits

Francois-Serge Lhabitant

The Manager's Concise Guide to Risk

Jihad S. Nader

Securities Operations: A guide to trade and position management

Michael Simmons

Modeling, Measuring and Hedging Operational Risk

Marcelo Cruz

Monte Carlo Methods in Finance

Peter Jäckel

Building and Using Dynamic Interest Rate Models

Ken Kortanek and Vladimir Medvedev

Structured Equity Derivatives: The Definitive Guide to Exotic Options and Structured Notes

Harry Kat

Advanced Modelling in Finance Using Excel and VBA

Mary Jackson and Mike Staunton

Operational Risk: Measurement and Modelling

Jack King

Advanced Credit Risk Analysis: Financial Approaches and Mathematical Models to Assess, Price and Manage Credit Risk

Didier Cossin and Hugues Pirotte

Risk Management and Analysis vol. 1: Measuring and Modelling Financial Risk

Carol Alexander (ed.)

Risk Management and Analysis vol. 2: New Markets and Products

Carol Alexander (ed.)

Understanding International Bank Risk

Andrew Fight



John Wiley & Sons, Ltd

Published by John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester,
West Sussex PO19 8SQ, England
Telephone (+44) 1243 779777

Copyright © 2004 Andrew Fight

Email (for orders and customer service enquiries): cs-books@wiley.co.uk
Visit our Home Page on www.wileyeurope.com or www.wiley.com

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except under the terms of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by the Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London W1T 4LP, UK, without the permission in writing of the Publisher.

Requests to the Publisher should be addressed to the Permissions Department, John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England, or emailed to permreq@wiley.co.uk, or faxed to (+44) 1243 770620.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the Publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

Other Wiley Editorial Offices

John Wiley & Sons Inc., 111 River Street, Hoboken, NJ 07030, USA

Jossey-Bass, 989 Market Street, San Francisco, CA 94103-1741, USA

Wiley-VCH Verlag GmbH, Boschstr. 12, D-69469 Weinheim, Germany

John Wiley & Sons Australia Ltd, 33 Park Road, Milton, Queensland 4064, Australia

John Wiley & Sons (Asia) Pte Ltd, 2 Clementi Loop #02-01, Jin Xing Distripark, Singapore 129809

John Wiley & Sons Canada Ltd, 22 Worcester Road, Etobicoke, Ontario, Canada M9W 1L1

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Library of Congress Cataloging-in-Publication Data

Fight, Andrew.

Understanding international bank risk / Andrew Fight.

p. cm.

Includes bibliographical references and index.

ISBN 0-470-84768-9 (cloth : alk. paper)

1. Banks and banking, International—Management. 2. Risk management. 3. Country risk.

I. Title

HG3881 .F514 2003

332.1'068'1—dc22

2003021829

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN 0-470-84768-9

Typeset in 10/12pt Times by TechBooks, New Delhi, India

Printed and bound in Great Britain by TJ International Ltd, Padstow, Cornwall, UK

This book is printed on acid-free paper responsibly manufactured from sustainable forestry in which at least two trees are planted for each one used for paper production.

Contents

Foreword	ix
About the Author	xi
1 The Banking Background	1
1.1 Different types of banks and their risk profile	1
1.1.1 Bank failure and the financial services community	1
1.1.2 What do banks do? How do they earn their money?	3
1.1.3 Different types of banks and their revenue structures	6
1.1.4 Commercial banks	7
1.1.5 Investment banks	10
1.1.6 Risk profile of investment banks	13
1.1.7 Broking is a competitive business	13
1.1.8 Derivatives trading and AAA subsidiaries	13
1.1.9 The regulation of investment banks	14
1.1.10 “Analyst of the year” awards	14
1.2 Primary causes of bank failure	16
1.2.1 Types of failures	17
1.2.2 Causes of losses	18
1.2.3 Warning signals in predicting bank failure	24
1.2.4 Rescuing the bank!	28
1.2.5 Credit rating agencies	30
1.3 Bank failures – the four aces	31
1.3.1 Bank of Credit and Commerce International	31
1.3.2 Continental Illinois	34
1.3.3 Crédit Lyonnais	36
1.3.4 Rumasa	39
1.4 The macroeconomic environment	41
1.4.1 Banking system and industry risks	41
1.4.2 Economic environment	43
1.4.3 Industry competition and its impact on banks	43
1.4.4 Technology	44

2	The Rating Framework	45
2.1	What is a rating?	45
2.2	The development of ratings	46
2.3	Background to rating agencies	46
2.3.1	Inconsistent initial foundations	48
2.3.2	Secretive deliberations	51
2.3.3	Main source of revenues	51
2.3.4	Generating value	53
2.3.5	Growth and the future	54
2.4	The rating analytical framework	56
2.4.1	CAMEL, CAMEL B-COM, and CAMELOT	58
2.4.2	Capital	59
2.4.3	Asset quality	60
2.4.4	Management	62
2.4.5	Earnings	64
2.4.6	Liquidity (liability management)	64
2.5	How the rating agencies analyse bank risk	65
2.5.1	What is a rating?	65
2.5.2	Rating scale comparisons	66
2.5.3	Standard & Poor's ratings	66
2.5.4	Moody's ratings	68
2.5.5	Fitch performance and legal ratings	69
3	The Regulatory Framework	73
3.1	Banking system: structure, governing law, and regulations	73
3.1.1	Banking supervision	75
3.2	Core principles for effective banking supervision	78
3.2.1	Core principles for effective banking supervision	78
3.2.2	Basel committee publications No. 30 (September 1997) on banking principles	80
3.3	Risk management	83
3.3.1	Generally accepted risk principles	83
3.3.2	Derivatives and market risk	84
3.3.3	Managing bank limits	86
3.3.4	Generally accepted risk principles risk map	87
3.4	Basle Capital Adequacy and international convergence	88
3.4.1	Background to the Basle Capital Adequacy regime	88
3.4.2	Pressures for change	89
3.4.3	The BIS paper: the response of the central banks	90
3.4.4	Foreign exchange and interest rate related exposure	93
3.4.5	Implementation	95
3.4.6	Impact of the BIS proposals	95
4	The Analytical Framework	97
4.1	Introduction	97
4.1.1	The specific nature of bank financial analysis	97
4.1.2	Sources of information on banks	98
4.1.3	Other sources of information	100

4.2	Financial criteria – the key factors	101
4.2.1	Financial statement analysis	101
4.2.2	Spreadsheet analysis	105
4.3	Understanding the bank’s balance sheet	107
4.3.1	Overview	107
4.3.2	Balance sheet	110
4.3.3	Assets	111
4.3.4	Liabilities	114
4.3.5	Contingent liabilities	117
4.3.6	Income statement	118
4.3.7	Financial analysis of investment banks	121
4.3.8	Risk profile of investment banks	125
5	Bankscope and Comparative Techniques	127
5.1	Bankscope spreadsheet analysis	127
5.2	Bankscope ratios and ratio analysis	130
5.2.1	Lines of the Bankscope global format	130
5.2.2	Financial ratio analysis	131
5.2.3	The Bankscope ratios	131
5.3	Bank peer group analysis	139
5.3.1	Analytical techniques	139
5.4	Problems with intercountry comparisons	141
5.4.1	Local vs international accounting standards	141
5.4.2	Inflation accounting	142
5.4.3	Creative accounting and ratio manipulation	143
6	Country and Political Risk	145
6.1	Country risk	145
6.1.1	Introduction to country risk	145
6.1.2	Definition of country risk	145
6.1.3	Types of countries	146
6.1.4	Country risk assessment	147
6.2	Political risk	148
6.2.1	Introduction to political risk	148
6.2.2	Time dimension	149
6.2.3	Political risk analysis methodologies	149
6.2.4	World Bank list of countries	150
6.3	Typical sovereign ratings process	151
6.3.1	Introduction	151
6.3.2	Political risk	152
6.3.3	Economic risk	154
6.3.4	S&P’s sovereign ratings profiles	160
6.3.5	Behind the sovereign ratings exercise	160
7	The World of E-finance	163
7.1	A quick definition of e-finance	163
7.2	CRM – Customer Relationship Management	164

7.3	STP/CLS	165
7.3.1	STP – Straight Through Processing	165
7.3.2	CLS – Continuous Linked Settlement	166
7.3.3	Establishment of Continuous Linked Settlement services	166
7.4	SWIFT	167
7.4.1	Background	167
7.5	Electronic funds transfer	169
7.6	Online banking	169
7.7	Day trading	169
7.8	Smart cards	170
7.9	Evolution of e-finance	172
7.10	Origin of e-finance and internet commerce	173
7.10.1	Rise Of e-finance and electronic trading	174
8	Conclusion	177
	Glossary	179
	Suggested Readings	201
	Appendix I	203
	Appendix II	209
	Appendix III	217
	Index	223

Foreword

Having worked as a financial analyst for 10 years, specialising in bank analysis at Chase Manhattan and later at one of the credit rating agencies, and as a financial consultant with a variety of clients in Eastern Europe, the ex-USSR, the Middle East, Asia and Africa, it seemed to me that there was a need to write a book on “understanding international bank risk”.

It seemed to me that the theory of financial analysis which I had been taught at Chase came up against difficulties in emerging market economies. The nature of the banks’ regulatory regime, and indeed banks themselves, was different to those operating in the mature markets of the EU. In many cases, I saw the phenomenon of importing western quantitative techniques without looking at the local context and considering some very basic issues. Moreover, the wave of banking failures and international banking crises, and their ability to propagate their effects internationally with extreme rapidity, rendered this an important and topical subject.

Bank financial analysis has the reputation of being a dull subject – to the general public it is, at least until a major bank goes bust, in which case panic ensues. Even in banks, corporate analysts tend to look at bank analysis as a dull subject. But far from dull it is! Once involved, bank analysis reveals itself to be an endlessly fascinating topic that assumes international scope. Understanding the different types of banks, the different cultures of various banks, their international differences, the national and international regulatory environment, the similarity of causes leading to bank failure all render the subject fascinating. Once you get past the word bank, what you are dealing with are entities with their own histories and specialisations which are effectively unique.

The bulk of the literature on international bank risk has hitherto been prepared by the big three credit rating agencies, and it is unfortunate to say that this literature is more marketing driven (rationalising shortcomings in the ratings process which failed to anticipate bank failure), than information driven (enabling the investor–creditor community to understand how to analyse international bank risk). This is most likely because the common sense “street cred” signals of bank failure are reveal too many unpleasant realities to address head on.

Moreover, the big three credit rating agencies all tend to look at risk in the same way, since they are all US-oriented companies using US-oriented methodologies on countries which have differing characteristics. Not only do they exercise a monopoly, they tend to use perspectives and methodologies which lend themselves to the accusation of being ethnocentric, not to mention ineffective. To those who find this excessively critical, consider that if the rating agencies’ methodologies are so excellent, why is their track record in predicting bank failure

and crises so much less than excellent, and why do they spend so much time rationalising their performance with verbal gymnastics? And why is such performance failure nevertheless enshrined in law and banking regulation?

This book therefore aims to consider some of the analytical techniques of bank financial analysis, bank failure, risk management, understanding the control mechanisms and regulatory framework, and explains how and why and when these fail. As such, we will consider the mechanisms of financial analysis in order to understand their methodologies and shortcomings.

The tools are well known and are presented. Despite the existence of these predictive tools, failure occurs, often amidst feigned surprise, officially unexpected by auditors and credit rating agencies. It is with this process that we shall primarily be concerned. We will consider financial analysis and consider why the effectiveness of those techniques is not translated into effective prediction of failure. Cases of bank failure and industry developments in regulation and disciplinary measures will also feature to place these abstract tools in the proper context. Either the tools are ineffective or there are other forces at work.

The book looks at some of the main elements of analysing bank and country risk, examining specialised sectors such as bank risk, bank financial analysis, bank qualitative analysis, bank ratings criteria and country risk analysis, and considers their advantages and shortcomings.

Bank mergers, resulting in larger banks (and thus increased risk concentration and volatility) further stimulates the need to understand the risks inherent in these entities, their operating environment and management culture, and the risks involved in dealing with them as trading counterparties.

With the financial services industry characterised by increasing international homogenisation, consolidation, concentration of risk, and volatility, it is important that bank managers, creditors, investors, and financial analysts keep abreast of these trends and developments.

Moreover, the impact of new technologies such as the internet and online banking offers new areas of activity and analysis to cover. Investment in information technology, or IT, is rapidly becoming the means to achieving competitive advantage in mature markets. It is fine to look at a bank's ALM policy in classic financial analysis terms, for example, but IT can be instrumental in strengthening a bank's retail depositor base. A chapter on some of the major categories of IT and e-finance is therefore also included.

The current environment underscores the increased need to know. It is hoped that this book goes some way to shedding light on the matter for bank analysts and managers.

Finally, I would like to express my thanks to Mr Kenneth I'Anson, Training Director at Euromoney Training and to Mr F X Noir, Directeur International of the Centre de Formation de la Profession Bancaire for the valuable material support and comments for this book. I would also like to thank Mr Tony Pringle, Managing Director of BVD Electronic Publishing in London, for kind permission to feature "Bankscope" in this book. I would also like to express my gratitude to various professionals at a number of firms in the City of London who provided valuable thoughts and insight; though many prefer to remain anonymous, their contributions are recognised and appreciated. Last but not least, I would like to thank Chris Swain, Sam Hartley, Rachael Wilkie, and Sally Smith at John Wiley & Sons for their support of this project and invaluable comments, thoughtful guidance and suggestions. Any errors or omissions, of course, are my own.

Andrew Fight
www.andrewfight.com

About the Author

Andrew Fight provides financial consulting and training services in the areas of Financial Analysis, Commercial, Syndicated, and Project Finance Lending, Asset Liability Management, Credit Risk Management, and Problem Loan Management.

He has over 15 years of experience in international banking and financial analysis gained in Paris and London with Chase Manhattan Bank, IBCA Rating Agency, Euromoney Training, the French and German Bank Training Institutes.

He is a consultant and financial trainer to the European Commission, USAID, several banks, central banks, and IT companies, and a successful author, having written over 15 books on financial analysis, banking risk analysis, credit risk management, credit rating agencies, and information technology in financial services.

A full description of his activities can be accessed on his website at www.andrewfight.com.

He divides his time between London, where he works, and his home in the South of France.

The Banking Background

When equipped with trustworthy, up-to-date, and independent information on a company and its competitors, investors, whether professional or amateur, can choose stocks wisely. But without sound information or, even worse, with misleading information, they may as well go gambling.¹



The regulatory and banking environment as seen in *Newsweek*, August 2002

1.1 DIFFERENT TYPES OF BANKS AND THEIR RISK PROFILE

1.1.1 Bank failure and the financial services community

Bank of Credit and Commerce International, Continental Illinois, Crédit Lyonnais, RUMASA, Barings. Major bank failures years in the making. Yet all were surprises when they occurred. Why?

The list of banking collapses and losses seems to be endless, and endlessly entertaining. How is it that the most heavily regulated of industries seems to provide us with a steady stream

¹ Sen. Joe Lieberman, *The Watchdogs Didn't Bark: Enron and the Wall Street Analysts*, United States Senate Hearing Before the Committee on Governmental Affairs, 27 February 2002.

of highly entertaining and edifying stories in which record amounts of monies are lost and bankruptcies occur?

How is it that a galaxy of economic gurus from academia and business, CEOs with their legions of disciples, accountants, bankers, and consultants, regulated by governments and transnational entities, seem not only to get it wrong, but massively wrong, and so often?

Can this be attributed simply to the fact that the business environment is ridden by incompetence and greed? Or is the state of the industry more complex than these mere generalisations?

The fact is, that individually, all experts and parties agree on the risks and pitfalls which characterise the liberal economic model (which resides on apparently ineffective structures attempting to regulate the twin pillars of human nature and greed), which presents itself as the universal panacea and most perfect system of allocating resources ever devised by mankind.

Individually. All the players, of course, are in on the secret.

The secret is that these “failures” are indeed not “failures” but rather the manifestation of various players interacting on a tableau of greed and chaos, and that when the balloon bursts, scandal and outrage ensue. Fall guys are left holding the bag. Mea culpas are made. A few sacrificial lambs are thrown in the fire to give the illusion that the system is self-cleansing. At the end of the day, however, the exercise is highly profitable for the few that have the intuition or connections to pull their chestnuts out of the fire before it is too late. Consider the quote in Box 1.1.

Box 1.1

Moody and other bankers seem to have believed that Wall Street analysts could use non-public information concerning the railroad industry to earn superior profits from bond trading. When Moody was considering his rating idea, one “old Wall Street buccaneer” advised him:

“You young pipe dreamer, why throw away your ten years’ experience of learning the rules of the game? Why give the public all the facts regarding the corporations for the price of a book? You will be showing them how to play safe and get rich, while you will make nothing yourself. Anyway, if you begin to flaunt too many facts, there won’t be much inside knowledge left to work on; you will be spoiling our game. Use your information yourself; don’t be a philanthropist. There’s no money in it!”

John Moody, *The Long Road Home*, 91 (1933)

Moreover, Moody’s rationale for marketing bond ratings was that he did not have sufficient capital to benefit from using inside information directly to earn profits from trading. According to Moody, although a person with capital could take advantage of inside information in the short-run, a person without capital (such as Moody) could earn greater long-run returns by selling the information “wholesale in a book”.

Collectively, things assume a momentum of their own, as varying individuals and parties, with interests and agendas of their own, collide in the wonderfully speculative, volatile, and chaotic free for all game which is our economic system. In order to protect oneself in a zero sum game, whose short-term focus means that resources are merely reallocated rather than created, parties will act to further their own interests at the expense of overall economic performance and rationality.

Banks of course are the indispensable intermediaries in the game and their role and the risks attending them will form the focus of this book.

This book will endeavour to explore the underlying nature of the industry, regulatory environment, and analytical techniques in vogue to try to answer some of the questions underlying the basic question of bank and country risk. For the truth of the matter is that the industry is comprised of several players with differing agendas and the occasional hiccups manifested by the industry are merely the logical outcome of their interactions.

In other words, the problems are not due to the specific personal characteristics, honesty or competence of individuals, they are the manifestation of those most basic of human characteristics – greed and fear – and how individuals with those characteristics interact within their structures as well as with the regulatory system.

The problems are also the manifestation of another human characteristic – creativity. Creativity at the service of the incessant and ongoing quest to circumvent rules (created by compromise, allegedly designed to minimise the volatile excesses and risks inherent in the financial services arena), and generate quick profits.

1.1.2 What do banks do? How do they earn their money?

Let us begin with basic questions. What are banks? What do banks do? How do they earn their money?

Banks, as with all business enterprises, establish goals and make the decisions necessary to achieve those goals. Banks, however, have specificity in that they do not actually manufacture tangible goods but rather are in the role of intermediaries and manage abstract resources (more commonly known as “money”). The management and processing of these abstract resources moreover bears some resemblance to the processing and transferring of information. This has important implications in an era in which information technology not only accelerates transaction cycles but also enables the processing of information crucial to the ongoing management of a bank’s operations (e.g. asset liability management, capitalisation, and customer centric database systems).

Implementation of the Basle capitalisation directives means that the unspoken goal of banks (those that can, that is) is to make money by collecting fees as deal originators as well as operating as intermediaries in the money markets (arrangers as well as lenders of monies).

The ability to integrate information systems in order to provide a seamless one-stop shop to major corporate clients is increasingly becoming the key differentiator in building market positioning. Hence, the issues of economies of scale and the wave of mergers witnessed. To illustrate, the present day JP Morgan Chase is the amalgam of four venerable New York banks – Manufacturer’s Hanover, which was taken over by Chemical Bank, which in turn took over Chase Manhattan (and adopted the more upmarket name in the process), which in turn merged with JP Morgan). This quest to increase economies of scale, however, has other negative ramifications which we shall cover later.

Despite the high school soporifics of Economics 101 and buzzwords referring to “multiple providers” and “perfect competition”, the industry, at least in European countries where the major retail banks are rarely more than a half-dozen, is basically exhibiting some of the characteristics of an oligopoly, and has witnessed increasing consolidation and elimination of marginal players.

This trend has been welcomed and fostered by governments and their regulatory bodies, as part of the current ideological movement which originated during the Reagan–Thatcher era as an antidote designed to dismantle the Keynesian economic model which came into existence during the administration of Franklin Roosevelt. The heart of the current “Globalisation”

agenda, which is the dismantling of the “New Deal”, the exorcising of Woodrow Wilson, and the building of a New World Order akin to the mercantile model pre 1914, except it’s wired and interconnected.

This poses two dilemmas.

- The first is ideological: the increasing concentration and oligopolisation of the business is a very negation of the basic principles of capitalism and competition, where buyers ostensibly enforce discipline on the market by selecting the most efficient or best product and eschewing the uncompetitive one. It is the erection of an oligopoly or monopoly structure designed to ensure that the providers can dictate their own prices and conditions, and stamp out any potential entrants or competitors threatening not their *existence*, but their ability to *dictate the terms of the market*. In the words of investment banker Felix Rohatyn, it is a “betrayal of capitalism”.
- The second is a practical one: with the weeding out of several players, risk becomes increasingly concentrated and the economic system increasingly vulnerable and volatile. To take an example, consider the syndicated loan. This has traditionally been a vehicle to raise large amounts of funds to lend to major corporates. A large loan will be underwritten by one or two banks and parcelled out to some say 20 banks, which results in reducing the loan into digestible chunks, as well as in dissipating the risk among the participating institutions. In the New York example, however, where in the past you had four banks able to assume the risk (or provide varying services and lending policies to the corporate borrower), you now have only one. Moreover, due to the onset of capitalisation ratios limiting a bank’s level of exposures, the larger entity does not necessarily take a proportionally larger commitment. This means that risk becomes more concentrated and the number of players reduced, thereby increasing the possibility of volatility and confidence sensitivity in the markets.

This reduction in the number of players in the market and increasing concentration of risk mean that the market increasingly assumes the characteristics of an oligopoly.

The New York example is similarly paralleled by Citicorp merging with Travellers Corp., Bank of America merging with NCB, HSBC taking over Midland Bank, BNP merging with Paribas, Cr dit Agricole merging with Banque Indosuez, the spate of bank mergers in Scandinavia, the merging of three Japanese banks into the Mizuho leviathan, etc.

The industry is increasingly assuming the attributes of a one entity state monopoly provider (a criticism oft levelled at the defunct Soviet Union by disciples of “free trade”) except that they are not accountable to any government or indeed effective regulation as the spate of financial scandals witnessed in 2002 testifies. They are increasingly becoming de facto if not de jure arbiters of the system, in no small part due to their ability to channel funds into the political process. And they are fostering the increasing concentration of risk.

Rather than have some 50 banks, of which say 10 may lend to an entity such as Enron, you now have three leviathans, all queuing up to fill up at the Enron trough (with resultant concentration of risk), and the economic system collectively getting a massive case of indigestion when the house of cards collapses (except for the loan officers who cashed in their bonuses for “booking assets”).

These esoteric arguments, however, do not even figure on the bank CEO’s radar screen – they have their own agenda to gain “critical mass” to browbeat the competition, and have a horde of share analysts badgering them for ever rising quarterly dividends, eager to pounce on the CEO for the slightest hiccup in forecasted results. The CEO will naturally be more preoccupied with these more immediate concerns (to his job safety) rather than the more esoteric questions of economic philosophy.

For most banks, the public message is that they exist to “ensure the safety of their depositors’ funds and to maximise the value of the organisation to its shareholders”. For publicly traded banks, this means maximising the return on and market value of its publicly traded stock. For banks that are not publicly traded, the usual yardstick for performance is its performance in achieving profitability and controlling risk.

It is important, however, not to confuse prudent management theories with reality. The excerpt in Box 1.2 from a *New York Times* article on the Enron shenanigans and bogus posting of loans by Citigroup provides a useful contrast.

Regarding the safety of depositors’ funds, it seems akin to asking one to believe in fairy tales when reading about real life bank failures (see Section 1.3 on the “four aces”).

Indeed one can recall four major cases of excessive risk taking by banks in the last 20 years:

- The massive lending to LDC (lesser developed countries) in the 1970s as a way of recycling the glut of petrodollars arising after the 1973 Yom Kippur war and OPEC oil boycott
- The mergers and acquisitions and leveraged buyout fever of the 1980s
- The boom and bust in property lending in the late 1980s/early 1990s (Canary Wharf, La Défence)
- The emerging market speculative ventures which came undone in the volatile 1990 markets (Asian crisis/Barings)

Ultimately the players all know that in the event of bankruptcy, the “flyover people” will foot the bill as they did in the Reagan era savings and loan crisis bailout. Who are the “flyover people”? Those folks that one flies over when to-ing and fro-ing from New York to Los Angeles.

Still, within the game, there are certain conventions and accepted methodologies used to assess banks.

We shall consider the accepted methodology of analysing these banks with their sophisticated regulations, structures, financial statements, mathematics, and some of their shortcomings, and how common sense can significantly supplement the efficacy of that analysis.

Despite failure, the tools are effective. Acting on the information provided by analysis, however, is another matter, and is beyond the scope of this book.

Box 1.2

July 23, 2002

Citigroup Said to Mould Deal to Help Enron Skirt Rules

By RICHARD A. OPPEL Jr. and KURT EICHENWALD

Senior credit officers of Citigroup misrepresented the full nature of a 1999 transaction with Enron in the records of the deal so that the energy company could ignore accounting requirements and hide its true financial condition, according to internal bank documents and government investigators.

The relationship between Enron and its bankers has been a focus of investigative efforts since the company collapsed amid an accounting scandal last December. For months, both Citigroup and J. P. Morgan Chase have been repeatedly criticized by investigators and shareholders’ lawyers for structuring billions of dollars of transactions for Enron involving entities with names like Mahonia, Yosemite, Delta and Stoneville Aegean.

The *NY Times* said that bankers intentionally manipulated the written record of their dealings with Enron to allow the company to improperly avoid the requirements of accounting rules and the law, thus keeping USD 125 million in debt off its books.

In the 1999 deal, the records show, the bankers knew that a secret oral agreement they had reached with Enron required that the accounting for the transaction be changed. Instead, investigators said, Citigroup left that side deal out of the written record and allowed Enron to account for the transaction in a way that the bankers knew was improper. In other words, the full terms of the deal were left out of the paperwork, with the result being that anyone reviewing it would have no idea that the accounting treatment being used by Enron was not proper.

A spokesman for Citigroup declined to comment, but he stressed that the bank believed that its dealings with Enron were “entirely appropriate.”

The transaction and other deals between Enron and the banks are expected to be examined today at a hearing before the Senate Permanent Subcommittee on Investigations. Already, some members of the committee have concluded that the “Roosevelt” transaction violated accounting rules.

“Citibank was a participant in this accounting deception,” said Senator Carl Levin, Democrat of Michigan and the panel’s chairman.

The subcommittee’s ranking Republican, Susan M. Collins of Maine, said the investigation had found that Citigroup was willing to risk its reputation “to keep Enron, an important client, happy.”

Mr. Bennett, the Enron lawyer, said the current criticisms by Congress were a result of political pressure to crack down on the appearance of corporate wrongdoing. “What we have here is an incredible amount of revisionist history, which is motivated by the upcoming election,” he said. “Most of the problems – not all of them – are things that have been legal and have been acceptable.”

Copyright 2002 The New York Times Company

1.1.3 Different types of banks and their revenue structures

It is helpful to begin first by considering the fundamental question of what characterises a bank. Basic definitions soon become inadequate, as banks are highly varied in the type of business they do, the types of revenues they generate, and the types of risks they assume in their ongoing operations.

There are several different types of banks and financial institutions. Some may be hybrids and others may be entities specialising in a particular operational niche.

These characteristics obviously affect a bank’s risk profile and the risk analysis to be undertaken.

Risk (and return) occurs through financial and non-financial decisions, as well as operational and loan portfolio development strategies. The risks arise from the bank’s operations and are all interrelated. We will examine these risks later in the book.

Banks differ widely in the composition of their activities, and can differ widely in culture due to their historical development. Merchant banks (or investment banks) differ considerably from other types of banks such as agricultural banks or cooperative banks. The differences in culture immediately become apparent in a merger, such as the merger of *Crédit Agricole*, initially an agricultural cooperative bank, with *Banque Indosuez*, a merchant bank with a colonial heritage.

While to an outsider, banks may appear to be only in the business of taking and lending money and issuing credit cards, this view is only skin deep.

The primary categories of revenue generation for banks, which we shall examine in further detail later, are:

- Interest income (from loans)
- Trading income (from currency and financial instruments)
- Fee/Commission income (income from setting up deals, providing advice and services)
- Investment income (from associates or subsidiaries)

The “mix” of these activities defines what sort of institution the bank is: namely a commercial bank, investment bank (also known as merchant bank), or other specialised institution. The wave of mergers witnessed, however, has resulted in a blurring of these categories.

These categories moreover help to define the bank’s behaviour with respect to matters such as:

- Chasing fee income (setting up deals to collect the fees and offloading the assets to second tier banks that do not have the ability to underwrite big ticket loans)
- “Stuffees” (the ability to underwrite deals, collect the fees, and “offload the assets” to second tier banks)
- Capitalisation ratios (does the bank have sufficient mass and balance sheet size to enable it to underwrite large loans?)
- Syndication ability (how well developed is the bank’s marketing to generate loans, and syndications department to place the loans in the market)
- Mergers (is the bank vulnerable and therefore pressured to undertake risky strategies to try to survive?)

There is industry standard software which enables comparative analyses of banks to be undertaken. This enables differences in the mix of revenue streams to be identified.

Most banks achieve their profits through a variety of ways, and this tends to define the type of institution they are.

Now, let us consider the main types of banks.

1.1.4 Commercial banks

Commercial banks are also known as “retail” or “clearing” banks (or in Europe “universal banks”). These are typically banks that provide a “full” range of services via an extensive branch network and receive a large part of their funding from the public in the form of retail deposits. Their clients range from individuals to major corporations.

Typical examples of commercial banks include Barclays and NatWest in the UK, Deutsche or Dresdner Bank in Germany, Crédit Agricole in France, ING and ABN Amro in the Netherlands, UBS in Switzerland, Chase, Citicorp, and Bank of America in the USA (see Table 1.1).

These are all very large banks with large retail depositor bases. They also all have specialised merchant banking or investment banking operations in the world’s major financial centres as well as international networks of bank branches worldwide.

Consider Figure 1.1 produced by the World Resources Institute.

This figure depicts the organisation and workflows in a typical commercial bank involved in project financing. There are other types of banks with differing structures – mortgage banks, investment banks, for example.

Deregulation and competition has meant that commercial banks have diversified in recent years from their core business of deposit and lending, into new areas such as instalment finance,

Table 1.1

Mark	Bank name	Total assets USD 000 last year	Equity USD 000 last year	Net income USD 000 last year
1	Citigroup Inc.	1 051 450 000	89 425 000	14 213 000
2	HSBC Holdings Plc	748 890 000	58 959 000	7 116 000
3	Bank of America, National Association	551 691 000	53 311 000	6 664 000
4	JP Morgan Chase & Co.	693 575 000	46 233 000	1 746 000
5	Royal Bank of Scotland Group Plc	649 376 878	43 584 710	5 169 046
6	Mizuho Holdings Inc.	1 099 018 041	42 247 748	-7 430 180
7	Crédit Agricole CA	609 502 571	35 990 135	2 585 791
8	Deutsche Bank AG – US GAAP	795 735 124	35 021 513	416 623
9	BNP Paribas	745 413 999	33 542 869	3 815 720
10	Wachovia Corporation	330 452 000	31 533 000	1 619 000
11	UBS AG – IAS	854 211 326	30 751 428	2 795 979
12	Wells Fargo & Company	307 569 000	29 686 000	3 429 000
13	Bank of China	406 149 599	26 712 135	985 043
14	Mitsubishi Tokyo Financial Group Inc.	702 874 610	26 124 625	-1 003 003
15	Merrill Lynch & Co., Inc.	447 928 000	25 533 000	2 513 000
16	Santander Central Hispano	334 799 461	24 943 540	2 923 287
17	Barclays plc	637 833 159	24 670 226	3 626 552
18	UFJ Holdings Inc.	575 574 324	23 819 069	-9 038 288
19	ING Group-Int'l Nederlanden Groep	751 778 781	23 442 124	5 070 836
20	Industrial Commercial Bank of China	524 234 608	23 309 371	754 398
21	Morgan Stanley	529 499 000	23 161 000	2 988 000
22	HBOS Plc	512 148 144	22 895 633	3 342 875
23	Rabobank Group	393 241 683	22 139 784	1 531 116
24	Credit Suisse Group	688 422 651	21 074 709	-2 405 439
25	FleetBoston Financial Corporation	203 638 000	20 558 000	934 000
26	Bank One Corporation	268 954 000	20 226 000	2 638 000
27	Bayerische Hypo Vereinsbank AG IAS	711 869 031	20 156 365	-900 409
28	Sumitomo Bank Ltd	527 891 856	19 633 575	707 829
29	Société Générale	526 041 557	19 529 856	1 565 747
30	US Bank National Association	166 949 094	19 431 199	1 801 600

Source: DC Gardner Training, 2003.

trade finance, mortgage lending, insurance, leasing, trust agencies, and investment banking. This has had the impact obviously of diversifying revenue streams to the point where such banks can be said to be comprised of several discrete profit centres.

Such diversification has also had the effect of increasing the portion of non-interest income activities, which has placed them in direct competition with investment banks. Indeed, the consolidation trends in the market have meant that several merchant banks have been absorbed by major clearing banks, such as the Chase Manhattan–JP Morgan merger or the Deutsche Bank takeover of Banker's Trust.

Another effect of these realignments of course has been to reduce the number of players in the market, which has had an impact on mechanisms to dissipate credit risk such as the syndicated loan.

While there are of course differences, commercial banks such as Citigroup in the USA, Crédit Agricole Indosuez in France, Deutsche Bank in Germany or ABN-AMRO in the Netherlands broadly follow similar characteristics: large retail depositor bases, a widespread network of

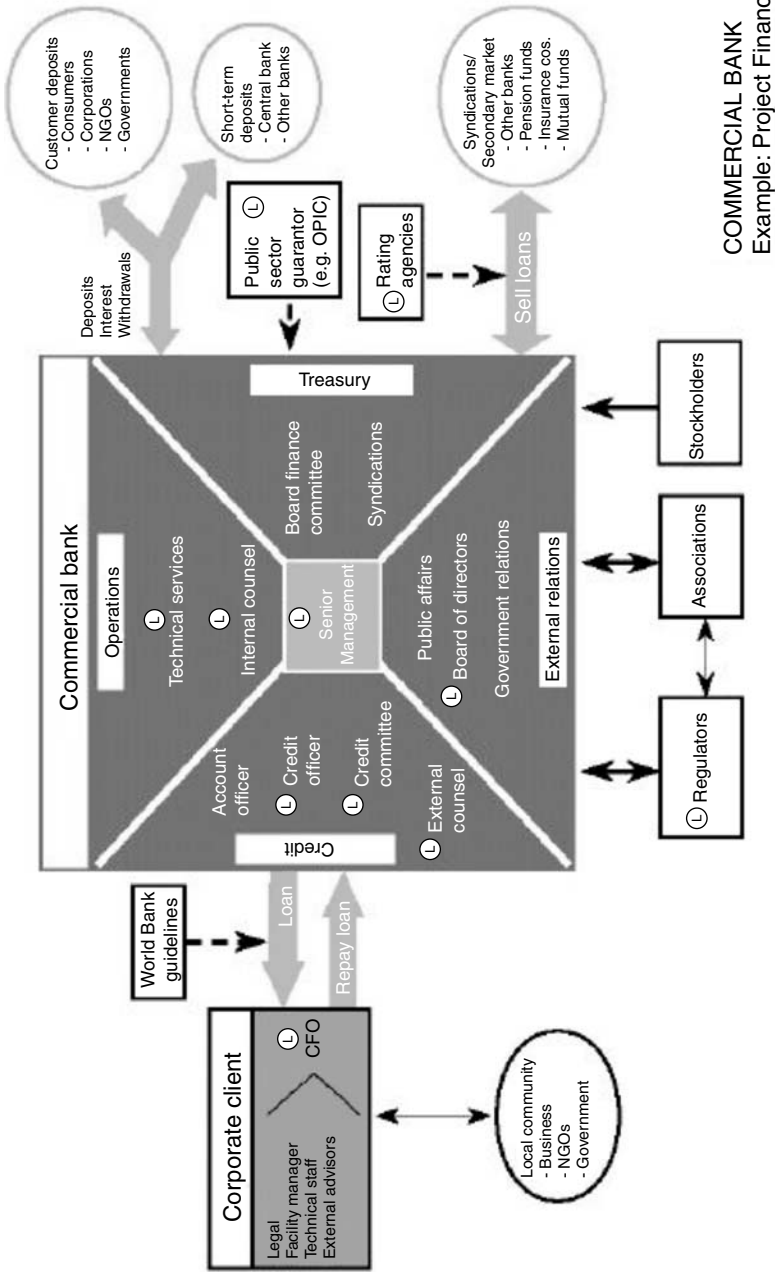


Figure 1.1
 © World Resources Institute – Guide to the Private Financial Services Industry.

branches in its home country, a far flung network of branches abroad, and a large portion of revenues generated by interest income (although fee/trading income is on the rise).

1.1.5 Investment banks

Investment banks historically were primarily active in the financing of international trade. Dwarfed by the vast balance sheet size and branch networks of the clearing banks, the investment banks have continued to prosper by exploiting various market niches, and competing through innovation, flexibility, and a willingness to participate in equity ventures, as well as a wide and specialised variety of banking services.

Such banks are now very much involved in areas such as mergers and acquisitions, corporate finance, underwriting, funds management, foreign exchange, investment management, financial advisory services, and Euromarket business. In addition, many investment banks have diversified, either through subsidiaries or substantial stakes in associated companies. These activities can include equipment leasing, hire purchase, factoring, insurance, insurance broking, shipping, property development and management, and real estate.

Having no significant retail depositor base, investment banks' main deposit taking activity has been via wholesale deposits for periods varying from one day to a year or more. Obviously, wholesale short-term funding is more volatile or "confidence sensitive" than a retail depositor base and represents a higher element of risk.

While investment banks' involvement in direct lending has virtually disappeared over the past few years, they are suppliers of corporate finance, concentrating on medium-term lending. In this connection, important aspects are the provision of funds for companies growing towards the size where they can consider a public flotation, medium-term finance for major UK exports backed by export guarantee (ECGD), and Eurocurrency loans.

The financial revolution associated with the UK's "Big Bang" in 1986 resulted in several UK investment banks acquiring major stock exchange firms in an effort to become "integrated security houses". The UK merchant banks have progressively become more like the US investment banks, and most of them have been acquired by the large European "universal banks" or US "investment banks".

US investment banks such as Salomon Brothers or Morgan Stanley were primarily involved in corporate finance. However, during the past 10 years, and especially since 1985, the growth of investment management and securities trading has been increasingly emphasised. Several banks like the US's Citibank and major European banks such as UBS and Deutsche Bank have exemplified this trend towards "universal banking" in London's internationally oriented markets. These mergers have tended to blur the differences between these types of institutions, and it is helpful to consider the differences as this understanding will be useful when we come to the financial analysis of a bank.

1.1.5.1 Historical background

In the 1930s the collapse of the US stock market and the consequent losses suffered by the US investment or securities institutions prompted the US regulators to split financial institutions into investment banks and commercial banks.

With the enactment of the Glass-Steagall Act, banks were split; JP Morgan became a commercial bank and Morgan Stanley an investment bank. The Japanese financial markets have been modelled on the US with commercial and investment banking separated by law.