

THE INTERNATIONAL BANKING SYSTEM

Capital Adequacy,
Core Businesses &
Risk Management

FELIX LESSAMBO

The International Banking System

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**Capital Adequacy, Core Businesses
and Risk Management**

Felix Lessambo
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Abbreviations

ADR	American Depository Receipt
ABS	asset-backed security
AIRB	advanced internal ratings-based approach
A/R	acid ratio
ARDC	American Research and Development Corporation
BHC	bank holding company
BIS	Bank for International Settlements
BoE	Bank of England
BoJ	Bank of Japan
BS	balance sheet
CAMELS	capital adequacy, asset quality, management, earnings, liquidity, and sensitivity to market risk
CBB	Central Bank of Brazil
CBR	Central Bank of Russia
CCS	Credit Card Services
CD	certificate of deposit
CDO	collateralized debt obligation
CFC	controlled foreign corporation
CPEC	convertible preferred equity certificate
CPI	Consumer Protection Index
CPM	comparable multiple method
CRR	cash reserve ratio
CVaR	conditional value-at-risk
DR	depository receipt program
EAD	exposure-at-default
ECB	European Central Bank
EL	expected loss
EMU	Economic Monetary Union
EPS	earnings per share

EU	European Union
ESCB	European System of Central Banks
Fed	Federal Reserve
FHA	Federal Housing Administration
FHC	financial holding company
FIDIC	Federal Deposit Insurance Corporation
FPHC	foreign personal holding company
FX	foreign exchange
GAAP	generally accepted accounting principle
GDP	gross domestic product
GO	general obligation (bonds)
GSE	government sponsored enterprise
HELOC	home equity line of credit
HUD	Department of Housing and Urban Development
IBF	international banking facility
IRA	individual retirement account
IRB	internal ratings-based approach
IRC	Internal Revenue Code
LAF	liquidity adjustment facility
LAVaR	liquidity-adjusted value-at-risk
LCR	liquidity coverage ratio
LGD	loss given default
LLC	limited liability company
LLP	limited liability partnership
M&A	mergers and acquisitions
MBS	mortgage-backed security
MPC	Monetary Policy Committee
MSS	Market Stabilization Scheme
NGO	non-general obligation (bonds)
NOL	net operating loss
NRSO	nationally recognized statistical rating organization
NSFR	net stable funding ratio
OBC	offshore banking center

OECD	Organization for Economic Development and Cooperation
OMO	open market operation
PBoC	People's Bank of China
PCAOB	Public Company Accounting Oversight Board
PD	probability of default
P/E	price-earnings ratio
PLS	private label securities
QSPV	qualified special purchase vehicle
RAROC	risk-adjusted return on capital
Repo	repurchase agreement
RBI	Reserve Bank of India
RFS	retail financial services
SA	Standardized approach
SAM	share appreciation mortgage
SAMA	Saudi Arabia Monetary Agency
SEC	Securities and Exchange Commission
SLR	statutory liquidity ratio
SPE	special purpose entity
SPV	special purpose vehicle
STRIPS	Separate Trading of Registered Interest and Principal Securities
TAAPS	Treasury Automated Auction Processing System
TIPS	Treasury inflation-protected securities
UFIRS	Uniform Financial Institutions Rating System
UK	United Kingdom
US	United States of America
VaR	value-at-risk

Cited Cases

1. Air Products and Chemicals, Inc., v. Airgas, Inc. (Del. Ch., C.A. NO. 5249-CC, 2/15/2011).
2. Francis v. New Jersey Bank, 432 A.2d 814 (NJ 1981)
3. Helvering v. Minnesota Tea Co., US 378 (1935)
4. Hort v. Commissioner of Internal Revenue, US S.Ct. 313 US 28 (1941)
5. Illinois Tool Works & Subs. v. Commissioner, 117 T.C., NO. 4, July 31, 2001
6. In Re Walt Disney Co. Derivative Litigation, Del. Ch.2003
7. Libson Shops, Inc. v. Koehler, S.Ct. 353 US 382 (1957)
8. Mills Acquisition Co. v. Macmillan, Inc., 559 A.2d 1261 (Del. 1989)
9. Moran v. Household International , Inc., 500 A.2d 1346 (Del. 1985)
10. New Colonial Ice Co. v. Helvering, S.Ct. 292 US 435 (1934)
11. Omnicare v. NCS Healthcare Inc., 818 A.2d 914 (Del. 2003)
12. Paramount Communications, Inc. v. QVC Network, Inc. 637 A.2d 34 (Del. 1994)
13. Phelps Dodge v. Cyprus Amax Minerals Co.,CA NO. 17398 (Del. Ch. Ct. 27 September, 1999)
14. Revlon, Inc v. MacAndrews & Forbes Holding, Inc. 506 A.2d 173 (Del. 1985)
15. Roosevelt Hotel Co., v. Commissioner, T.C. 399 (1949)
16. Smith v. Van Gorkhom, 448 A.2d 858 (Del. Supr. 1985)
17. Unocal Corp. v. Mesa Petroleum Co. 493 A.2d 946 (Del. 1985)

Preface

Financial markets have become global, and are closely interrelated. Among the big players are commercial and investment banks. They perform core banking functions and underpin the main economy. They also provide efficient payment mechanisms, facilitating transactions and extending loans to those in need of liquidity, providing value in our economies as liquidity intermediaries. The landscape of the international banking system is rapidly changing, with the world's top three banks from China, and America's largest bank down to the fifth position.¹

The first banking activities can be traced back to around 2000 BCE, in Assyria and Babylonia. Modern banking activities date back to Medieval and early Renaissance Italy, while the development of the banking industry we recognize today started in the 19th century, when banks evolved into large commercial entities extending loans to the general public. The internationalization of business in the 20th century facilitated the emergence of universal banking activities.

The demarcation line between commercial and investment banking has become blurred in recent decades. In the United States, for example, prior to the repeal of the Glass–Steagall Act on November 12, 1999, commercial and investment banks operated in two distinct arenas. Commercial banks focused on regular individual and business activities. They collected deposits from their clients and extended loans to businesses, both new and old, to start or develop an ongoing undertaking. Investment banks, meanwhile, assisted businesses in the raising of capital. The repeal of Glass–Steagall allowed commercial banks to engage in core activities formerly restricted to investment banks and vice versa. In so doing, the Gramm–Leach–Bliley Act, also known as the Financial Services Modernization Act, created a sharp conflict of interest among commercial banks and investment banks. It altered the culture of the US banks without putting in place a clear mechanism of control to secure, or at least monitor, the overall banking system. Through mergers and acquisitions or internal restructuring, US banks were allowed to operate as both commercial and investment banks. Juggernaut banking institutions, later referred to as too big to fail, escaped almost completely from being under sound supervision. The premises upon which Gramm–Leach–Bliley relied were revealed to be illusory. The fate of the international banking system is linked to the fate of the overall financial system.

The collapse of the Bretton Woods era was followed by unfettered deregulation among various banking authorities. The phenomenon and philosophy

would be accentuated in the 1990s under US Federal Reserve Chairman Alan Greenspan, who was a proponent of market fundamentalism.²

Non-banking institutions such as insurance companies were allowed to engage in banking operations. US banks thus become supermarket banks offering, under the same umbrella, retail and wholesale banking, investment banking and various intermediary financial institutions. Several regulatory authorities across the world followed the American path of deregulation, at the expense of their core economies. Five years after the onset of the financial crisis in 2007, the six largest American financial institutions are significantly bigger than they were before the crisis.³ Supervising, or at least controlling, their activities has become a challenge. In the US, banks are under the supervision of at least four institutions: the Office of the Comptroller of the Currency, the Federal Reserve Board, the Federal Deposit Insurance Corporation, and the State Bank Regulators. It was the Federal Reserve that failed to detect the 2007 crash, which would lead to the rescue of the well-known “too-big-to-fail” banking institutions despite the claimed rules of the free market.

We need to ask whether the financial crisis of 2007–2009 redrew the picture of the international banking system. Many US and European Union juggernaut banks have opened their capital structures to funds from Asian sovereign funds, but they still operate under the old corporate governance structures that led to the crisis. As the world financial center of gravity has shifted eastward, major international banks are rushing to the booming Asian markets – Hong Kong, Shanghai, Singapore – to stay financially afloat. Would they commit themselves to observing laws and regulations in their new territories? The international banking system is shaped by the laws and regulations of the main financial players, including the US Federal Reserve, the European Union Central Bank, The Central Bank of Japan, the Bank of England, the People’s Bank of China, the Reserve Bank of India, the Central Bank of Russia, the Central Bank of Brazil, the Saudi Arabia Monetary Authority, and the Bank for International Settlements. The regulatory efforts shaped by the Bank for International Settlement – Basel I, II, and III – if properly followed could stabilize the international banking system. Compliance with these laws and regulations is vital to all players around the world.

This book is organized into three parts. Part I analyzes the role played by the main financial players already listed. It highlights the different monetary policies pursued and their effects on the banks’ business. Part II investigates capital adequacy and the main banking operations. Bank capital is a proxy, especially in the securities marketplace, for public confidence in the banking system or any specific bank. The inadequacy of capital coupled with, in some cases, managerial fraud, has created a risky situation in the international banking system, especially where domestic banking supervision is weak.⁴ Part III focuses on risk management, which has become a heated topic generally,

but has particular application to banking as a result of the internationalization of the system. As the trend continues, risk management becomes a core business in the banking field.

Notes

1. Joseph Stiglitz (2010) *Free Fall, America Free Markets, and the Sinking of the World Economy*, W. W. Norton & Company, p. 224.
2. Otto Hieronymi (2009) *Globalization and the Reform of the International Banking and Monetary System*, Palgrave Macmillan, p. 18.
3. Their assets are worth over 66% of the United States' GDP (US\$94 trillion), 20% up from the GDP in the 1990s.
4. James C. Baker (2002) *The Bank for International Settlements*, Quorum Books, pp. 44–45.

Part I

Regulators

1

The US Federal Reserve Bank

1.1 Introduction

The Federal Reserve Bank is the central bank of the United States. It does not conduct commercial banking activities; rather, the Federal Reserve role consists of maintaining stable economic growth. The Federal Reserve originated from the Owen-Glass¹ bill introduced in both houses of Congress and became law in December 1913. From its inception, the Federal Reserve was assigned three key purposes: (a) to provide an elastic supply of currency; (b) to provide a means to discount commercial credits; and (c) to supervise and regulate the nation's banks. Later on, as a result of changes in our modern economy and needs, the Federal Reserve has been assigned to provide full employment as well. The US Federal Reserve System and its Federal Reserve Board is the most powerful central bank in the world.²

In order to gain a better understanding of the Federal Bank of the US, it is crucial to shed light on the historical facts that provided the framework for the Bank. The US financial industry went through several crises during the 19th and 20th centuries. Major businesses and banks faced bankruptcy during the economic turmoil. The failure of the nation's banking system to effectively provide funding to troubled depository institutions contributed significantly to the economy's vulnerability to financial panic.³ In 1907, the economic crisis impelled Congress to establish the National Monetary Commission, which put forth proposals to create an institution that would help prevent and contain financial disruptions of this kind.⁴ During this time, payments were disrupted throughout the country because many banks and clearinghouses refused to clear checks drawn on certain other banks, a practice that contributed to the failure of otherwise solvent banks.

After some consideration, Congress finally approved the Federal Reserve Act: to provide for the establishment of Federal Reserve banks; to furnish an elastic currency; to afford means of rediscounting commercial paper; to establish

a more effective supervision of banking in the United States; and for other purposes.⁵ President Woodrow Wilson signed the Act into law on December 23, 1913.

The Federal Reserve System is generally regarded as an independent central bank because its decisions do not have to be ratified by the President or anyone else in the executive branch of government. It is, however, subject to supervision by the US Congress. The Federal Reserve must work within the framework of the overall objectives of economic and financial policy established by the government. Almost a century after President Andrew Jackson vetoed the re-chartering of the Bank of the United States in 1832, the US government lacked a central mechanism for regulating the money supply to control inflation or deflation and to boost the economy in times of recession and depression. This resulted in conflict arising between creating a powerful private central bank and focusing on giving the job to a government agency. Finally, during the Progressive Era, President Woodrow Wilson proposed, and Congress enacted, the Federal Reserve Act of 1913, which combined private banks with government regulation.⁶

The Federal Reserve was created by Congress “to provide a safe, flexible, and stable monetary and financial system. The agency conducts the nation’s monetary policies, supervises and regulates banks, guards the credit rights of consumers, and provides financial services and information to the government, financial institutions, and the general public.”⁷ This creates a financial system that has become the foundation of the US Federal Reserve System. The Federal Reserve Board has generally responded well to financial crises, although critics charged that the Board’s tight-money policies following the stock market crash of 1929 worsened the subsequent depression. The Board’s efforts to end double-digit inflation in the late 1970s triggered a severe recession. In the 1990s, the Board under Chairman Alan Greenspan was widely “credited” with keeping inflation down during the longest uninterrupted period of sustained prosperity in the nation’s history.⁸ Since the 2007–2009 financial crisis unfolded, many have come to express doubts concerning Mr Greenspan’s monetary policy. Most economists came to vilify his actions as Chairman of the Board: the lax regulations and loose monetary policy developed under his chairmanship are seen as the direct causes of the current financial bubble.

To some economists, the Federal Reserve failed miserably to forecast the state of the US economy, and when it pretended to have a forecast, the model used was flawed. The Board of the Federal Reserve was not only discredited all around the world, but many expressed serious reservations about the intellectual capabilities of those in charge of our monetary policy. To many, the Federal Reserve is an opaque institution, not accountable to the nation for its actions. Most of the Federal Reserve’s actions are and remain discretionary, and its monetary policy a mystery. As well as all these flaws, the Federal Reserve is