

Commercial and Investment Banking & the International Credit and Capital Markets

*a guide to the global finance industry
and its governance*

Brian Scott-Quinn

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COMMERCIAL AND INVESTMENT BANKING AND THE INTERNATIONAL CREDIT AND CAPITAL MARKETS

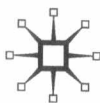
A Guide to the Global Finance Industry
and Its Governance

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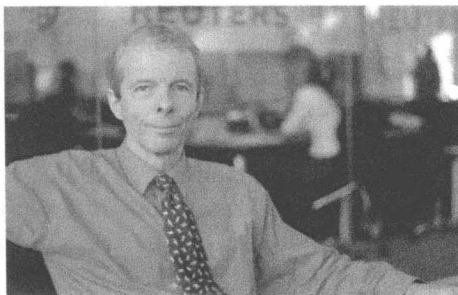
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ABOUT THE AUTHOR



Professor Brian Scott-Quinn is Chairman of the ICMA Centre for financial markets at Henley Business School, where he is Director of Banking and Strategy Programmes. He worked in the fields of investment banking, securities trading, asset management and stockbroking prior to founding the ICMA Centre in 1994 as a specialist university finance

school. It is focused on securities markets and banking and is sponsored by the International Capital Markets Association (ICMA), which is the trade association and market regulator for some 400 banks, investment banks and asset managers active in the international capital market (www.icmagroup.org).

Originally a financial manager with Coats Viyella, the FTSE 100 multinational textile company, his career in the City of London started as a trainee with the merchant bank Hill Samuel. He then became a fixed income analyst with Kidder Peabody Securities Ltd. Along with three others he was a founder of Ross & Partners Securities Ltd – a privately owned international bond trading house. After negotiating the sale of Ross & Partners to Drexel Burnham Inc. he became finance director of Drexel Burnham Lambert Securities Ltd, responsible for funding and risk management. He then moved to Security Pacific Bank (now part of Bank of America Merrill Lynch), a Californian bank with an office in London. Initially a portfolio strategist he subsequently became strategy advisor to the Group CEO, working on issues relating to the commercial bank, the securities trading operation and the stockbroker Hoare Govett.

In 1994 he proposed to ICMA the concept of a business school devoted exclusively to issues related to the financial services industry. The board of ICMA agreed to allocate £3 million from their capital account for constructing a purpose-designed building to house the ICMA centre at the University of Reading, near London (in the 2012, *Times Higher Education Student Experience Survey* 'league tables', Reading was ranked 12th in the UK). ICMA has since donated a further £5 million to the university which enabled the construction of a second facility that includes some 100 Thomson Reuters terminals with associated trading, valuation, risk management and asset management software. He was Director of the Centre from the time he founded it until 2006 when he took up the newly

created post of Chairman. Today, the ICMA Centre is one of the largest university finance schools in Europe and is part of the triple-accredited (AMBA, EQUIS and AACSB) Henley Business School, the UK's oldest business school which is home to some 7,000 students from over 140 countries.

His main area of consulting and executive education is business unit and corporate strategy in the financial services industry, which will be the subject of his next book.¹ He has been a consultant to, amongst many others, Westpac Bank, NM Rothschild, Canada Life Insurance, Australian Mutual Provident (AMP), Investec Bank, Shuaa Capital (Dubai), the London Stock Exchange and SWX Europe (the Swiss exchange). He was a member of the Financial Services Authority (FSA) industry working group on Secondary Bond Market Transparency. He has been a consultant to the US Treasury and in 1978/79 he was a monetary policy advisor to Margaret Thatcher's first Chancellor of the Exchequer (finance minister), Lord Howe of Aberavon (Sir Geoffrey Howe). He is also a director of the holding company for LendLoanInvest.co.uk, a peer-to-peer social lending platform infrastructure provider.

He and his civil partner live in Notting Hill, London and also near Exeter in Devon. He welcomes suggestions for new content for the next edition of this book and his proposed new book. He can be contacted at bsq200@me.com

¹ *'Management of Complex Financial Institutions: The Economics of, and Strategy Development in, Wholesale and Investment Banking, Asset Management, Insurance and Financial Infrastructure Companies'*

PREFACE

In most areas of employment, professionals learn about their industry by starting with a text which gives a broad sweep of the whole industry and provides a guide as to how all the working parts fit together. They then advance to specialised texts. Finance, unfortunately, has become so focused on its various 'silos' that most people in the industry *start* by focusing on a specialised text relevant only to the narrow area they will be working in, without first developing an overall mind map of the industry, its functions, its inter-connections and its structure. They may learn the intellectual underpinnings of finance – EMH, CAPM, M&M, Black-Scholes, etc. – at university, but without gaining any real understanding of the limitations of models as nothing more than 'idealised' representations of the real world. They are also likely to have learned only about a world in which risk can be 'calculated' mathematically rather than about today's world of increasing uncertainty.²

In this new world, finance theory is less useful than it once was. Indeed, once rational expectations theory and the efficient market hypothesis have been mastered, the most valuable practical insight today may be to understand the circumstances in which these theories may lead to entirely wrong investment conclusions as a result of market failure and the consequent misallocation of resources. It is unlikely that at university many people would have covered the new world of developed market sovereign finance, which has moved into the difficult territory of structured finance, voluntary write-down and collective action clauses. Today even politicians need to try to understand these arcane concepts; thus I have written some chapters and case studies to give at least a flavour of the issues in this political/financial area.

I have focused on trying to fill a 'gap in the market' for a book on the industry as a whole and thereby to produce a text that combines the needs of both industry

² Frank Knight, in his key work *Risk, Uncertainty, and Profit* (1921) Boston, MA: Hart, Schaffner & Marx; Houghton Mifflin Company, established the distinction between risk and uncertainty: 'uncertainty must be taken in a sense radically distinct from the familiar notion of risk from which it has never been properly separated. It will appear that a measurable uncertainty or risk proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all'. Thus Knightian uncertainty is unmeasurable, i.e. it is not possible to calculate uncertainty, while risk is in principle measurable. The impact of the financial crisis and the eurozone sovereign debt crisis would both fall into the territory of uncertainty rather than risk. In such an environment, investors tend to shun all risky securities, which hence can be substantially mispriced.

professionals and those undertaking the study of finance at university. There should, of course, be no divorce between these two groups – professionals and students – who are indeed often one and the same but at different stages in their career. Their needs are similar in that both need an understanding of markets (credit and capital) of organisations (commercial and investment banks, asset managers, insurers and financial infrastructure providers) and of governance and regulation.

What I have tried to do in this text is to cover the three interrelated aspects of the business³ of finance:

- *how markets should work*: competition and price discovery, but also *market failure*;
- *how organisations should work*: cooperation and integration within and between companies, but also *company (bank) failure*;
- *how governance should work*: the social, political, corporate governance, risk management and regulatory framework within which markets and organisations are permitted by society to function, and which are designed to ensure that markets and organisations function as they should, *but also the implications when they fail*.

Today we also have an additional issue: that of the governance of nation states and of the eurozone grouping of nation states not working as was intended and the impact of this failure feeding back to markets and banks. This destructive feedback loop between states and financial firms, particularly in the eurozone, is one of the key unresolved issues of our age and impacts all major countries including the US and China.

Professionals, in particular senior executives, regulators and parliamentarians with responsibility for the finance industry, need to understand not just particular job functions, products or markets but this complex industry as a whole. They need to think in terms of all three of the above aspects individually but equally in terms of their interrelationship. At the same time they need to understand the elements of specialised areas with which they are not conversant and in particular recent developments such as securitisation, synthetic ETFs, dark pools, algorithmic trading, peer-to-peer lending as well as more traditional areas such as risk management, private equity, M&A, IPOs and derivatives, all of which are covered in this text. Finally, as new regulations such as Basel III raise the cost of bank intermediated finance, I cover the disintermediation of credit intermediaries (banks), the consequence of which is an ever-increasing proportion of financing being provided through capital markets and also through the so-called shadow banking system.

³ This is a modified version of the way in which the Dean of the Yale School of Management, Edward Snyder, sees the world of business in general, not specifically finance. He has been quoted as saying that business schools have taught the first two of these aspects very successfully but that the third is the real challenge.

This book is a guide for those industry professionals who are:

- about to move into a managerial role and, although well-established and successful in a single area of finance, understand that they will not succeed without a good understanding of the industry as a whole, new products and markets, regulatory pressures and issues relating to strategy development but also for;
- those who are just entering the industry, such as those on a graduate training programme, who need an industry-wide perspective plus an understanding of new developments, before focusing on their speciality.

It is also intended to assist students and their teachers:

- on an MBA programme, which may in the past have used traditional finance textbooks which ensure an understanding the EMH, CAPM, M&M and Black-Scholes but may not provide an understanding of how the industry works in practice, the limitations of financial models or issues related to governance;
- on an MSc in Finance programme which has a wide range of specialist theory courses, but which also requires an understanding of the practical application and limitations of that theory;
- in the final or penultimate year of a BSc business or management programme where students need to understand the finance industry as potential users of its services, rather than as potential employees in the financial services industry who also require highly specialist programmes.

Last, but by no means least, it is for those who have a *need to know*, such as lawyers and accountants who service this industry, regulators (and parliamentary committees) who oversee it and, importantly, financial services industry employees who are not in the 'front office' but in key functions such as financial control, product control, operations management, treasury, IT and compliance and who need to understand the industry, its products, the risks it creates and how to minimise them.

This is a 'modern' text in the sense that it covers all the major developments in markets in the period from the year 2000 – the year which seems to have been the starting point for many of the developments which led to the global financial, eurozone and US government debt crises – up to the start of 2012. But by the term 'modern' I also mean a contrast with the past when the credit and capital markets were treated separately in different texts, since authors frequently had experience of one side of the financing business but not the other. Hence we had texts on 'money and banking' and others on 'capital markets' but with the 'cross-over' areas of securitisation and shadow banking being omitted. Today it is important to see credit and capital markets in an integrated way which is manifest in the new organisational structure of some investment banks where lending and capital markets are both within the investment banking department.

In a book of this nature, chapters on regulation of firms and markets are as important as chapters on the firms and the markets themselves. I therefore have one chapter on regulation of firms and one on regulation of markets. The re-regulation of both areas following the financial crisis and the failure of existing

regulation to avert it, has led amongst other things to what is known as Basel III, the Volcker Rule (the Dodd Frank Act), ring fencing of the UK's retail banks, regulations requiring the majority of derivatives transactions to be undertaken on exchange and cleared through a clearing house and may possibly lead even to taxes on financial trading in the EU. That regulation of risk taking is necessary (if the financial crisis alone was not sufficient to suggest this) is probably exemplified by the recent case⁴ of the large loss (\$2.2bn over just a few weeks and possibly a much higher loss by the time positions are unwound) in the unit of JP Morgan which was supposed to hedge the bank's exposures to risk (the Chief Investment Office). JP Morgan is believed by many to be the best managed bank in the United States with the best risk management systems yet at the time of writing; this loss suggests that risk management is still as much an art as a science and, worryingly, probably even less effective in many other banks than in JP Morgan.

A book of this nature can be no more than an introduction to the issues in today's financial markets. This is a dynamic industry and always in rapid flux. Any reader who really wants to understand it needs to ensure that they follow developments throughout their career. It is only by doing this that a person will stand out in the corporate environment as someone who understands the theory⁵ but also has his or her ear 'close to the ground'. It is such people who are likely to be singled out for promotion or for a management role. The *Financial Times* (FT) has by far the best analytical articles of any newspaper and is, of course, also very up to date. For those who are unable to purchase paper copies, it is also available electronically worldwide and can be read easily on an iPad. You will notice many references to the FT in this book, and these represent some of the best insights into the issues in today's markets. The other publication is *The Economist*. This is a weekly publication which has an excellent finance section. It also publishes special reports on, amongst other areas, finance. It too is available electronically.

Today I would say that we are in The New Age of Uncertainty. This is a similar phrase to that used by one of the world's best-known economists, Professor John Kenneth Galbraith of Harvard University. *The Age of Uncertainty* is a 1977 book and also a television series, co-produced by the BBC. Galbraith acknowledges the successes of the market system but associates it with instability and social inequity. Today we once again have to face these same issues of financial and economic instability and social inequity but on a much greater scale than in 1977. But more specifically in the field of finance we are facing a world in which the financial models which have pervaded the mindset of bankers and regulators and governed decision-making for some 50 years, and in particular our framework for

⁴ Reported in the press on 10/11 May 2012.

⁵ I cover the necessary finance theory, though relatively briefly, in particular the rational expectations hypothesis and its cousin, the efficient market hypothesis (though I also cover market failure), the capital asset pricing model and its application in contributing to the reduction of the risk premium in new financing, and Modigliani and Miller's theory of capital structure and the issues it raises in relation to bank capital structure and moral hazard resulting from the 'too big to fail' doctrine. These theories are all essential to understanding finance, but as many readers will have already covered them I will *not* go into the depth that some specialised textbooks do.

risk management, no longer provide the certainty we once believed they gave us. We have shifted, as we noted earlier in this Preface, from a world of measurable risk to Knightian uncertainty.

Another major difference between this book and many others is that it has a fully global perspective rather than just covering the US markets with a brief nod to the existence of 'overseas' markets, as is still the case with many older texts. Clearly my own experience is European though; as I have worked for a number of US commercial and investment banks, I have a good understanding of their *modus operandi*. I have also taught Chinese, Korean, Thai and other Asian students at Henley Business School for many years and provided teaching and consulting services to investment banks and asset managers in Beijing, Shanghai, Shenzhen, Seoul, Taipei, Dubai and Riyadh which I hope has given me a more global perspective than many authors. Today there is a symbiosis between the Western world, which is short of savings and in particular of risk capital, and the Asian and Middle Eastern worlds, which have surplus savings and may be willing to act as 'patient investors' with a long-term horizon provided the expected return on such investments is commensurate with the risk involved. Their sovereign wealth funds are increasingly becoming the investors of last resort for equity-starved banks and other financial institutions. This symbiosis has become a key feature of the second decade of this century, but it also brings new risks to both sides.

Parts I–III cover the core of the banking/investment banking business and in particular capital allocation and liquidity creation through bank credit, shadow banking and primary and secondary capital markets. Collectively, these three sections are relatively self-contained. **Parts IV–VII**, which comprise the remainder of the text, are essentially on risk management, governance and control. Risk management covers managing risk in both investor portfolios and financial-sector firm balance sheets. Governance and control covers internal firm governance but also, and importantly, external control over the internal capital allocation process via the market in corporate control. This is the mergers and acquisitions market and, closely related to it, the private equity business with its unique governance and control structure. In the most regulated industry in the world an understanding of regulation is important and is a key aspect of governance and control. Finally I cover fundamental changes in the industry structure, ethos, ethics and performance which has been ongoing over the past quarter century but has been manifest most dramatically since the year 2000.

ACKNOWLEDGEMENTS

My interest in the global financial system arose in the first instance from my experience of working in the international capital market in the 1980s and 1990s. I am particularly grateful to Emeritus Professor Sam Hayes, of Harvard Business School, who encouraged me, at that time, to write an earlier book on Investment Banking. Sam has also inspired me to write this one. One of my biggest supporters in this project has been John Langton, chief executive of the International Capital Market Association from 1991 to 2005. John was the driving force within ICMA in its efforts to improve its global education services for the international capital markets, including the creation of the ICMA Centre itself. The continuing support of ICMA under its subsequent leadership has allowed us to create a centre dedicated to financial markets within Henley Business School, which is second to none.

Those who have helped me in rethinking how credit and capital markets actually work, given what we have learned from market failures since 2007, are numerous. But I would particularly like to thank Tim Clarke, formerly a global financials analyst for his help throughout the creation of this book and in particular for his suggestions on structure. My thanks to Louis Trincano of Access Capital Partners, a private equity fund-of-funds, who reviewed the chapter on private equity, to Professor Charles Goodhart of LSE, who cleared up some important points for me in relation to bank credit – something that is ever more important these days for understanding how financial markets work, and to Con Keating, who gave me advice on issues relating to the meaning of liquidity. Mark Casson from the University of Reading has, as always, given me good advice in this project as has Konstantina Kappou, a new colleague at the ICMA Centre who has joined us after 10 years working in sales and trading in the City of London.

Most importantly, my partner Tony Stokoe, without whose support I could not have written this book, has been very patient with me and allowed me to spend more time in my office than is probably good for anyone.

ABBREVIATIONS

ABS	asset backed security
AFME	Association of Financial Markets in Europe
AIG	American Insurance Group
ALM	asset and liability management
AP	authorised participant
ATs	alternative trading systems
BATS	Better Alternative Trading System (registered name of an exchange)
BCBS	Basel Committee on Banking Supervision
bp	basis point(s)
CAC	collective action clause
CAPM	capital asset pricing model
CBT	computer based trading
CCP	central counterparty
CDs	certificates of deposit
CDO	collateralised debt obligation
CDSs	credit default swaps
CSDs	domestic central securities depositories
DB	defined benefit
DC	defined contribution
DDM	dividend discount model
DMA	direct market access
ECB	European Central Bank
ECNs	electronic communication networks
EMH	efficient market hypothesis
ESM	European Stability Mechanism
ETFs	exchange traded funds
FICC	fixed income, currency and commodities
FSA	Financial Services Authority
GLBA	Gramm–Leach–Bliley Act
HBOS	Halifax Bank of Scotland
HFT	high-frequency trading
ICMA	International Capital Markets Association
ICSDs	international central securities depositories
IDB	interdealer-broker
IIF	Institute of International Finance
IMF	International Monetary Fund

IPMA	International Primary Market Association
IPO	initial public offering
ISD	Investment Services Directive
ISMA	International Securities Market Association (renamed ICMA)
LBOs	leveraged buy outs
LGD	loss given default
LIBOR	London Inter Bank Offer Rate
LIFFE	London International Financial Futures Exchange
LOLR	lender of last resort
LSE	London Stock Exchange
M&A	mergers and acquisitions
M&M	Modigliani and Miller hypothesis
MiFID	Markets in Financial Instruments Directive
MMMFs	money market mutual funds
MTFs	multilateral trading facilities
MTM	mark-to-market
NAV	net asset value
NBBO	national best bid and offer
NMS	National Market System
NPV	net present value
NRSRO	Nationally Recognized Statistical Rating Organizations
NYSE	New York Stock Exchange
OMS	order management system
OTC	over-the-counter
OTF	organised trading facility
P&I	principal and income; principal and interest
PD	probability of default
PE	private equity
QE	quantitative easing
RM	relationship managers
ROE	return on equity
SEAQ	Stock Exchange Automated Quotation (LSE)
SEC	Securities and Exchange Commission
SEF	swap execution facilities
SETS	Stock Exchange Electronic Trading System (LSE)
SIFI	systemically important financial institution
SIVs	securitised investment vehicles
SMEs	small and medium sized enterprises
SPV	special purpose vehicle
SSS	securities settlement system
SWFs	sovereign wealth funds
UCITS	undertakings for collective investments in transferable securities
VAR	value at risk

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