

PROFESSIONAL PERSPECTIVES ON BANKING AND FINANCE



EDITOR

MOORAD CHOUDHRY

**Professional Perspectives on Banking
and Finance,
Volume 1**

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Editor

Moorad Choudhry

Professional Perspectives on Banking and Finance is a collection of cutting-edge articles written by practitioners for practitioners. Each volume addresses core topics such as risk management, corporate governance and strategy, but with the emphasis on recent developments and their impact on the industry. Articles will not discuss theory: the emphasis is 100% on advice and suggestions reflecting best practice. The content will be accessible, clear and applicable in any commercial bank. All articles in each volume of Professional Perspectives will reflect a diverse global outlook, addressing issues of importance and relevance for all bankers.

Professional Perspectives on Banking and Finance, Volume 1

EDITOR

PROFESSOR MOORAD CHOUDHRY

The BTRM, London



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INVESTOR IN PEOPLE

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Claire Trythall is Head of Treasury Risk at Newcastle Building Society. She was previously Head of Asset-Liability Management at Hodge Bank and has held positions at Barclays Bank, Tesco Bank and Cumberland Building Society, within the fields of ALM and IRRBB. Claire has a first-class degree in Banking and Finance from the University of Derby, where she earned recognition as the Best International Business Student, and a Higher National Diploma in Business from Staffordshire University.

Preface

A warm welcome to this, the first hopefully in a series of volumes that will address current and emerging challenges and risks in the banking industry. The book's contents are directed at practitioners in banking; the ultimate aim is to encourage debate and discussion at bank boards and asset-liability committees (ALCOs) about how best to address current issues and, if deemed necessary, adjust strategies and business models so as to remain viable and relevant. It goes without saying then that the primary readership this series hopes to attract are senior executives and non-executives in banking.

We have assembled a diverse group of contributing authors, each of them recognised experts in their field, and all either current or recently retired bank practitioners. The chapters are divided into four parts.

Part I: Current and Future Challenges in Banking

In the first chapter, I consider current and emerging future challenges in banking. It being 2023, the implied question in the chapter title was put first to 'ChatGPT', an artificial intelligence (AI) programme that generated not inconsiderable comment and debate after it was 'released' to the world for use by essentially anyone. Our intention was to determine how effective, and genuinely practically beneficial, the output from ChatGPT was. The reader will draw their own conclusions, of course; ours was that (and only after a number of iterations) the effort of the AI platform merited, at best, a 'C+'. Our non-AI view considered that the challenges to all banks – whether traditional branch-based or newer digital 'challenger' or 'neo' banks – were many and varied, ranging from intense competition and geopolitical pressures to the better known ones such as liquidity risk and market risk. It was the latter, after all, that sunk one or two California-based banks in 2023, albeit in a slightly modified form aided and abetted by a new challenge, that of 'social media risk'.

In Chapter 2, Khaliq Ali presents a comprehensive discussion of strategic risk management in banks and how to approach it. As a risk type, it is recognised by the Basel Committee for Banking Supervision (BCBS) as one that banks should manage, but as Mr Ali states, 'Strategic Risk is [often] overlooked and is difficult to objectively quantify and manage...'. We hope his chapter helps to fill some gaps in this area.

Claire Trythall presents the first of two chapters authored by herself in this volume in Chapter 3. In an accessible account directed at asset-liability management (ALM) desks in banks, she recommends that ALM managers incorporate a number of key macroeconomic indicators when devising their approach to balance sheet risk management. And we do mean ‘recommends’ – there are 10 value-added recommendations articulated explicitly in this chapter.

Climate change risk management is a current important area of focus in banks, occupying the minds of everyone from the Board of Directors downwards. In Chapter 4, Miranda Love presents what may appear at first sight to be almost a polemic, but on closer reading shows clearly, almost self-evidently, that this is an area that banks all around the world need to take seriously, and not simply because of regulatory fiat. Edward Bace continues the environmental and sustainability theme in Chapter 5, where he discusses the value of including ‘green bonds’ in a bank’s non-equity liability structure. As he suggests, there are sound reasons, both ESG and shareholder related, for doing so.

Part II: Regulation and Risk Management

In the second part of the book, we look at regulation and risk management. Fittingly, in the post-2008 crash era of ever more complex regulation and supervision, in the face of ever newer risk types, in Chapter 6 Graham Hillier goes ‘back to basics’ and emphasises that sound principles of traditional, and conservative, risk management in banking remain as important as ever. In essence, if one gets the basics right, everything else will fall into place.

That said, all practitioners in banking will know and appreciate that the industry is a heavily regulated one. Most banks around the world employ a team of people (this team can range in size from one person to several hundred people, depending on the size and complexity of the bank) engaged in what is termed as ‘horizon scanning’. This simply involves watching out for the latest publication from the regulatory authority, dissecting it, disseminating it and suggesting how this regulation will impact the bank’s operational procedures and risk management processes. These days, depending on one’s jurisdiction, regulatory compliance occupies more senior executive time than any other single activity that said executive will undertake.

In light of this, we include two chapters that will assist the horizon scanning process. In Chapter 7, Peter Eisenhardt asks the question, ‘Where are we going?’ with regards to bank regulation. Periklis Thivaivos then hints at an answer to this in the very next chapter. Following the publication by the Basel Committee for Banking Supervision (BCBS) of what is termed ‘Basel III’ bank supervision guidance in 2010, which was followed by the ‘final form’ of Basel III in 2017 (also referred to as ‘Basel IV’ or ‘Basel 3.1’), he suggests that we are heading for ‘Basel V’. All one can say at this stage is, watch this space!

In Chapter 9, Dr Andreas Ita looks at the lessons learnt for risk management from two recent market events, the default of Archegos Capital Management in March 2021 and the unusually large price jumps in energy markets in summer 2022. He finds that the counterparty exposure from margined derivatives transactions exceeded the required initial margin significantly in both cases, so that the

exposures were largely uncollateralised when it mattered the most. In addition, the Basel Committee's Standardised Approach on Counterparty Credit Risk (SA-CCR) results in regulatory capital requirements that are insufficient to cover the banks' losses from the unwinding of large and concentrated derivatives exposures. This made it difficult for some banks to identify the high loss potential from their large trades with a single client. Dr Ita's chapter should be required reading for the Board members of banks that run large derivatives trading and prime brokerage operations!

Part III: Best Practice in Interest Rate Risk Management

When soliciting submissions for this book, we were intrigued by the number of authors who wished to cover interest rate risk in the banking book (IRRBB). Possibly this was due to the failure of Silicon Valley Bank, which some have suggested was due to poor (or non-existent, or incompetent – it depends whose views one deems to be the most accurate) IRR management. In any case, the number of chapters on this topic means the subject warrants a whole part to itself.

There are a number of facets to this discipline. Arnau Lopez kicks off in Chapter 10 with a high-level data analytics view, addressing the importance of good management information when addressing regulatory requirements for IRRBB. His chapter is of relevance to any bank, irrespective of size or balance sheet complexity.

In Chapter 11, Beata Lubinska looks in detail at two particularly thorny aspects of the IRRBB discipline: how best to hedge 'pipeline risk' and 'prepayment risk'. Her chapter presents worked examples of the recommended approach to structural hedging of these risk types, which helps ensure that her text remains clear and accessible throughout.

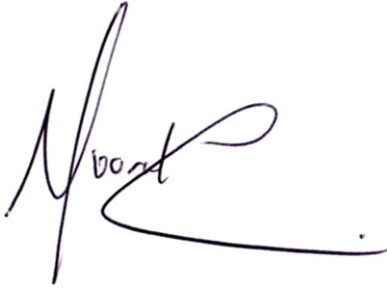
Chapter 12 is the second of Claire Trythall's chapters in the book, and she also looks at prepayment interest rate risk in residential mortgage assets. However, she considers a specific approach to solving this conundrum, the 'rate incentive' method.

Patrick Carey rounds out Part III with a chapter that looks at the future of interest rate risk hedging. Considering the future challenges that face banks is clearly a common theme in this book! His chapter should be required reading for every bank's ALCO.

Part IV: Trading and Relative Value Perspectives

We thought we would leave the most technical and arcane subject for last! In Chapter 14, Trevor Pugh looks at the gilt futures basis. By this, we mean the UK Government bond market and the 'basis' (difference in price/yield) between the cash bond gilt and the exchange-traded bond futures contract. That one sentence may need explaining for some readers! However, when I first studied this subject, I found that getting to grips with the intricacies of the bond futures basis actually helped in understanding – properly understanding – many aspects of the wider financial markets. Mr Pugh does a fine job in taking the reader through the bond futures basis and explaining why it works as it does and how to interpret what the basis is telling us.

I enjoyed editing this volume, and I hope that you enjoy reading it. I also hope that readers find the contents to be of practical benefit in their 'day job'. Comments on the text are welcome and should be sent to the Editor via Emerald Publishing.

A handwritten signature in black ink, appearing to read 'Moorad Choudhry', with a large, sweeping flourish extending to the right.

Professor Moorad Choudhry
Surrey, England
30th September 2023

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Part I

Current and Future Challenges in Banking

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Chapter 1

The Changing Business Landscape: Competitive Priorities for Resilient Banks

Moorad Choudhry

The BTRM, London

Drafting history

ChatGPT was presented with the task, 'Write an account of the changing business landscape for banks and their competitive priorities', in June 2023. Four successive iterations were then run in order to reach the requested 3,500 word count, yet by the fifth iteration, it was still at 2,900 words, at which point the exercise was abandoned. Two subsequent edits of the ChatGPT output were undertaken in July 2023 and September 2023, in order to format and tidy up the final answer and to excise repetition in the text. The final edit is presented here.

The author's thoughts on the topic, written in September 2023, are presented after the ChatGPT version for comparison.

ChatGPT Output Abstract

In an era of rapid technological advancements, economic uncertainty and evolving customer expectations, banks face numerous challenges to remain competitive and resilient. This essay explores the changing business landscape for banks and identifies the key competitive priorities they must address to maintain their relevance and sustainability. The essay highlights the significance of digital transformation, risk management, customer experience and strategic partnerships as critical factors for success in the modern banking industry. Through a comprehensive analysis of these priorities, this essay provides valuable insights and recommendations for banks to thrive in the face of ongoing disruptions.

Introduction

The banking industry has undergone significant transformations over the past decade, primarily driven by technological advancements and changing customer preferences. Banks now find themselves operating in a rapidly evolving business landscape, marked by intense competition, regulatory changes and emerging risks. To remain resilient and gain a competitive edge, banks need to adapt their strategies and prioritise key areas that contribute to their long-term success. This essay will explore the changing business landscape for banks and discuss the competitive priorities they must embrace to ensure resilience in the face of these challenges.

Digital Transformation: Embracing Technological Advancements

The Importance of Digital Transformation in Banking

In today's digital age, banks need to embrace digital transformation to meet the changing expectations of customers and leverage emerging technologies. Digital transformation involves the integration of digital technologies into all aspects of the business, fundamentally changing how banks operate and interact with customers. This section discusses the significance of digital transformation in enhancing operational efficiency, expanding service offerings and fostering innovation. It explores the adoption of automation, artificial intelligence (AI), data analytics and cloud computing to drive transformational change in banking. The essay provides examples of successful digital transformation initiatives implemented by banks and highlights the benefits they have reaped in terms of cost savings, enhanced customer experience, improved decision-making capabilities and increased market share.

Harnessing Automation and AI in Banking Processes

Automation and AI technologies have revolutionised various banking processes, such as customer onboarding, risk assessment and fraud detection. Banks can leverage robotic process automation (RPA) to automate repetitive tasks, freeing up valuable human resources to focus on more complex and strategic activities. Additionally, AI algorithms can analyse large volumes of data to identify patterns and make predictions, aiding in making more informed decisions. This section explores the use of automation and AI in banking processes and their impact on efficiency, accuracy, customer satisfaction and regulatory compliance. It discusses the challenges and considerations involved in implementing automation and AI solutions, including data privacy, ethics and the need for continuous upskilling of employees. The essay provides recommendations for banks to effectively leverage these technologies while addressing these challenges.

Leveraging Data Analytics and Cloud Computing in Banking

Data analytics and cloud computing play a pivotal role in enabling banks to derive insights, enhance risk management and improve decision-making. Data analytics involves the use of advanced analytical techniques to extract meaningful information from vast amounts of structured and unstructured data. Cloud computing provides banks with scalable and cost-effective storage and computing power, enabling them to process and analyse data more efficiently. This section delves into the importance of data analytics in understanding customer preferences, detecting patterns, tailoring offerings and predicting future needs. It explores the benefits of cloud computing, such as scalability, cost efficiency, enhanced data security and flexible infrastructure. The essay discusses the challenges and considerations in adopting data analytics and cloud computing in banking, including data governance, data privacy, regulatory compliance and integration with legacy systems. It provides strategies for successful implementation and highlights the potential impact of emerging technologies, such as edge computing and blockchain, on data analytics and cloud computing in banking.

Risk Management: Safeguarding Stability in Uncertain Times

Evolving Risk Landscape for Banks

In an era of economic uncertainty and increasing regulatory scrutiny, effective risk management is crucial for the resilience and sustainability of banks. The risk landscape for banks has evolved significantly, with new threats such as cyberattacks, regulatory changes, geopolitical instability and pandemics. This section discusses the evolving risk landscape and the challenges banks face in managing risks associated with cybersecurity, compliance, credit, liquidity, operational aspects and reputation. It examines the impact of regulatory changes, emerging technologies, geopolitical factors and global events on risk management practices. The essay emphasises the need for banks to develop a comprehensive understanding of risks, prioritise risk mitigation efforts and build agile risk management frameworks.

Building Robust Risk Management Frameworks and Balance Sheet Management

To effectively manage risks, banks need to establish robust risk management frameworks that encompass identification, assessment, mitigation and monitoring of risks. A comprehensive risk management framework ensures that risks are identified and addressed proactively, reducing the likelihood of adverse events and their potential impact. This section explores the elements of a comprehensive risk management framework, including risk appetite, governance structure, risk culture and risk measurement techniques. It discusses the importance of leveraging advanced analytics, predictive modelling and scenario analysis to proactively identify and mitigate emerging risks. The essay also emphasises the significance of

establishing clear communication channels, risk reporting mechanisms and risk appetite frameworks within the organisation. It highlights the role of technology in risk management, including the use of risk management software, data analytics and AI-powered risk assessment tools.

In addition to establishing robust risk management frameworks, banks must prioritise proper balance sheet management to ensure stability and mitigate financial risks. Effective balance sheet management involves optimising the composition and structure of a bank's assets and liabilities to achieve desired risk-return profiles. This section highlights the importance of balance sheet management as a critical component of overall risk management strategies for banks.

Liquidity Risk Management. One of the key aspects of balance sheet management is liquidity risk management. Liquidity risk refers to the risk of a bank's inability to meet its short-term obligations as they become due. Banks need to maintain adequate liquidity buffers to withstand unforeseen events, such as funding disruptions or sudden increases in deposit withdrawals. By effectively managing their liquidity positions, banks can reduce their vulnerability to liquidity shocks and maintain their ability to fulfil financial obligations. This section discusses the importance of liquidity risk monitoring, stress testing and contingency planning in ensuring sufficient liquidity. It explores strategies such as diversifying funding sources, maintaining liquid assets and establishing contingency funding arrangements to enhance liquidity resilience.

Capital Adequacy and Capital Allocation. Proper balance sheet management also involves ensuring adequate capital adequacy and efficient capital allocation. Capital adequacy refers to the amount of capital a bank holds to absorb potential losses and maintain its financial stability. Banks are required to meet regulatory capital requirements to safeguard against unexpected losses and promote financial resilience. This section delves into the importance of capital planning, stress testing and capital allocation strategies in optimising a bank's risk-weighted assets and capital ratios. It discusses the role of risk-adjusted return on capital (RAROC) and economic capital frameworks in guiding capital allocation decisions. Furthermore, the section explores the relationship between capital adequacy, risk appetite and the overall risk profile of a bank.

Asset–Liability Management (ALM). ALM is another critical aspect of balance sheet management for banks. ALM involves aligning the maturity, interest rate and liquidity characteristics of a bank's assets and liabilities to manage interest rate risk and optimise profitability. This section discusses the importance of ALM in mitigating interest rate risk, optimising net interest margin and ensuring an appropriate asset–liability mix. It explores strategies such as duration gap analysis, interest rate risk modelling and hedging techniques to manage interest rate risk. The section also emphasises the significance of monitoring and stress testing the impact of changing interest rate environments on a bank's earnings and capital positions.

Credit Risk Management. Effective balance sheet management also encompasses credit risk management, which involves assessing, monitoring and mitigating the risk of default or credit losses associated with lending activities. Banks need to maintain a healthy credit portfolio by implementing sound underwriting standards, robust

credit risk assessment models and proactive monitoring and management of credit exposures. This section highlights the importance of credit risk management practices, including credit risk assessment, loan portfolio diversification, credit risk modelling and collateral management. It explores strategies for early detection and management of credit deterioration, including loan loss provisioning, loan workout programmes and credit risk transfer mechanisms.

Profitability and Performance Measurement. Proper balance sheet management also aims to optimise profitability and measure the performance of a bank's assets and liabilities. Banks need to analyse the profitability of various business lines, customer segments and product offerings to identify areas of strength and weakness. This section discusses the importance of measuring profitability metrics, such as return on assets (ROA), return on equity (ROE) and net interest margin (NIM). It explores the use of cost allocation methodologies, activity-based costing and product profitability analysis in assessing the contribution of different assets and liabilities to overall profitability. The section also emphasises the significance of benchmarking performance against peers and industry standards to identify opportunities for improvement.

In conclusion, proper balance sheet management is a crucial component of building robust risk management frameworks for banks. By effectively managing liquidity, ensuring capital adequacy, aligning asset and liability characteristics, managing credit risks and optimising profitability, banks can enhance their financial stability, resilience and long-term sustainability. A comprehensive approach to balance sheet management, integrated with overall risk management strategies, enables banks to navigate the changing business landscape with agility and seize growth opportunities while mitigating potential risks.

Strengthening Cybersecurity and Compliance

With the increasing frequency and sophistication of cyber threats, banks need to prioritise cybersecurity measures to protect sensitive customer data, maintain trust and comply with regulatory requirements. Robust cybersecurity infrastructure, including firewalls, intrusion detection systems, encryption protocols and incident response plans, is essential to safeguard against cyberattacks. Banks must also invest in employee training to raise awareness of security risks and establish robust incident response plans to minimise the impact of potential breaches. Furthermore, compliance with regulatory requirements, such as anti-money laundering (AML) and know your customer (KYC) regulations, is critical to maintaining trust and avoiding penalties. This section discusses the importance of investing in cybersecurity measures, employee training and incident response plans. It explores the use of advanced technologies, such as machine learning and behaviour analytics, in detecting and preventing cyber threats. The essay also highlights the significance of regulatory compliance and the role of technology in facilitating compliance processes, including transaction monitoring, fraud detection and reporting.

Customer Experience: Building Lasting Relationships

Changing Customer Expectations in Banking

Customer expectations in the banking industry are rapidly evolving, driven by advancements in technology, changing demographics and experiences from other industries. Customers expect convenient and personalised experiences, seamless interactions across multiple channels and quick access to relevant information. This section explores the factors driving changing customer expectations, such as convenience, personalisation, transparency and value-added services. It highlights the importance of understanding customer journeys and leveraging data analytics to create personalised offerings and experiences that meet and exceed customer expectations.

Embracing Customer-Centric Technologies

To enhance customer experience, banks need to leverage customer-centric technologies that align with changing customer expectations. This section discusses the role of technologies such as chatbots, mobile banking apps, personalised recommendations, open banking and voice-activated assistants in providing 24/7 support, simplifying transactions and delivering tailored financial advice. Chatbots, powered by AI, can handle routine customer queries, improving response times and freeing up human agents to address more complex issues. Mobile banking apps offer customers the convenience of managing their finances anytime and anywhere. Personalised recommendations based on customer data analytics can assist customers in making informed financial decisions. Open banking enables secure data sharing and collaboration between banks and third-party providers, fostering innovation and expanding service offerings. Voice-activated assistants, utilising natural language processing, allow customers to interact with banking services through voice commands, offering a more intuitive and seamless experience. This section explores the impact of these customer-centric technologies on improving customer experience, increasing engagement and building lasting relationships. It provides insights into successful implementation strategies, including considerations for data privacy, security and user experience design.

Leveraging Data Analytics for Customer Insights

Data analytics plays a critical role in understanding customer preferences, identifying patterns and predicting future needs. Banks can leverage data analytics to segment customers based on their behaviour, demographics and preferences, allowing for personalised offerings and targeted marketing campaigns. By analysing customer data, banks can gain valuable insights into customer needs and tailor their products and services accordingly. However, data analytics must be approached ethically, with due consideration given to customer privacy and data protection. This section explores the use of data analytics in segmenting customers, identifying cross-selling opportunities, predicting churn and developing personalised marketing strategies. It discusses the ethical considerations surrounding the use of customer data and the importance of transparency, consent and data privacy in maintaining customer trust. The essay also explores the