

Contents

1. Functions & Structure of the Financial System

1.1	INTRODUCTION 1	
	Core Financial Infrastructure Requirements	3
1.2	FUNCTIONS OF FINANCE	4
	Finance and other economic services	8
1.3	A FUNCTIONAL APPROACH TO REGULATION	9
	Payments System Regulation	9
	Fintech, Economic Functions, and Regulation	10
1.4	BANKS V MARKETS	10
1.5	THE AUSTRALIAN FUNDS MANAGEMENT SECTOR (AN OVERVIEW)	13
1.6	FINANCE AND GROWTH 15	
	Empirical Evidence	16
	How can the financial sector be “too big”	17
APPENDIX 1.1	18	
	Examples of Alternative Methods of Financial Function Delivery	18
APPENDIX 1.2: HOW TAX DISTORTS THE FINANCIAL SECTOR		19
	An Australian Illustration	19
	Tax and Business Structures	22
APPENDIX 1.3: SOME DEFINITIONS		22

2. Types of Financial Institutions

2.1	AUSTRALIAN FINANCIAL INSTITUTION TYPES: INFORMATION SOURCES	1
2.2	BANKS AND ADIS	2
2.3	“SHADOW” BANKING	6
2.4	INVESTMENT BANKS/SECURITIES FIRMS/STOCKBROKERS	7
2.5	TRUSTEE COMPANIES	9
2.6	COLLECTIVE INVESTMENTS (MANAGED INVESTMENT SCHEMES)	10
2.7	CASH MANAGEMENT FUNDS (CMTS)	12
2.8	PENSION FUNDS (SUPERANNUATION)	14
2.9	LIFE OFFICES	17
2.10	FRIENDLY SOCIETIES	18
2.11	GENERAL INSURERS	19
2.12	NEW INNOVATIONS: PLATFORMS - CROWD-FUNDING, P2P/MARKET-PLACE LENDERS	19
2.13	CUSTODIANS	22
2.14	ISLAMIC FINANCE	24
2.15	OTHER TYPES OF FINANCIAL INSTITUTIONS	26

3. The Changing Financial System

3.1	INTRODUCTION 1
3.2	FINANCIAL SECTOR EVOLUTION IN AUSTRALIA 2
	The Pre-deregulation landscape 2
	The Deregulation Phase (1979-1990) 5

	The 1990's	6
	The early 21st Century	7
	The GFC	8
	Post GFC	9
	The Covid Crisis and the Financial Sector	10
3.3	BANKS AS "BLOODY BIG BUILDING SOCIETIES"	11
3.4	DRIVERS OF CHANGE	15
	Theories of Financial Innovation	16
	Electronic Technology and "Fintech"	16
	Customer Focus and Customer Loyalty	18
	Pricing and Fees for Service	20
	Industry Structure and Competition	21
	Organisational Structure	22
APPENDIX:	MAJOR GOVERNMENT REPORTS/ INQUIRIES	23
4.	The Basics of Banking	
4.1	INTRODUCTION	2
4.2	BANK LEGAL STRUCTURES	5
4.3	AUSTRALIAN BANK STRUCTURES	7
	Bank Structure & Account Consolidation – Which figures?	10
	Australian Bank Business Unit Structures	12
	Australian Bank Reports and Presentations	13
4.4	BANK BALANCE SHEET FUNDAMENTALS	14
	A simplified bank balance sheet	14
	Bank Accounting	16
4.4	CAPITAL MEASUREMENT PROBLEMS	17
	Capital Measurement: Alternative Perspectives	18
	The Owner's Perspective	18
	The Manager's Perspective	19
	Customer and Regulator Perspective	19
	Alternative Capital Measurement Approaches	20
4.5	BANK EQUITY: BOOK VALUES V MARKET VALUES	21
4.6	LOAN IMPAIRMENT, PROVISIONING AND BANK CAPITAL	22
	Impairment, Provisioning, and "Non-monetary defaults"	24
4.7	BANK BALANCE SHEET STRUCTURES	25
4.8	OFF BALANCE SHEET (OBS) ITEMS	26
	Non-Market Related OBS exposures	26
	Market Related	27
	Valuation Adjustments	28
4.9	THE TRADING BOOK AND THE BANKING BOOK	28
	Loss Absorbing Capacity (LAC)	29
4.10	BANK BALANCE SHEETS AND BANK FUNDING	30
4.11	BANK ASSETS	32
4.12	BANK FINANCES: INCOME AND EXPENDITURE	33
4.13	COMMONLY USED PERFORMANCE INDICATORS	35
4.14	NET INTEREST MARGIN BEHAVIOUR	38
	Some Theory and Empirics	40

4.15	THE NII – NONII MIX	43
	Academic studies – diversification and NONII	43
	Australian data	43
4.16	BANK EFFICIENCY	44
	Empirical Studies	45
	Economies of Scale and Scope	45
	X-Efficiency in Banking	47
	Bank Profitability	48
	APPENDIX 1: THE RESIDUAL INCOME MODEL	51
	APPENDIX 2: BANK DEPOSITS AS AN OPTION	52
	Insights from the Option Perspective	54

5. Bank Structure, Ownership and Governance Issues

5.1	INTRODUCTION 1	
5.2	BANK OWNERSHIP	2
	Some History regarding Bank Ownership Structures	2
	Mutuals	3
	The EEC and Cooperative Banks	5
	Bank Ownership and Non-Banking Activity Restrictions	7
5.3	AUSTRALIAN MAJOR BANK BUSINESS STRUCTURES	8
5.4	BANKING CONGLOMERATES	11
	Conglomerates, Risk and Regulation	15
	Diversification and Performance	15
5.5	BRANCHING, FRANCHISING AND BANKING SERVICE DELIVERY	16
	Trends in Australian Bank Branching	16
	Community Banking	18
	Outsourcing via Mortgage Brokers	19
	Franchising	20
	Australia Post – Bank@Post	21
	“White-labelling” of banking products (BaaS)	21
5.6	BANK GOVERNANCE	22
	Governance and Performance	23
5.7	BANKER REMUNERATION AND ACCOUNTABILITY	24
	Banker remuneration: what do we know?	24
	Recent Developments	25
	APRA’s remuneration standards	26
	The BEAR (and FAR)	27

6. The Australian Banking Market

6.1	INTRODUCTION 2	
6.2	THE STRUCTURE OF THE AUSTRALIAN ADI MARKET	3
	Customer Satisfaction	6
6.3	COMPETITION IN BANKING MARKETS	7
	Concentration and Competition: The Issues	8
	Difficulties in Assessing Competition in Banking	9
	Measuring Competition in Banking Markets	9

	Structure-Conduct-Performance	9
	New Economic Industrial Organization (NEIO) approach	11
	The Lerner Index	11
	The Rothschild – Bresnahan – Lau Indicator	12
	Panzar-Rosse H statistic	12
	The Boone Indicator	13
	Behaviour and Characteristics	13
6.4	AUSTRALIAN COMPETITION POLICY TOWARDS BANKING	14
6.5	FOREIGN BANKS IN AUSTRALIA	16
	The Introduction of Foreign Banks	17
	The Theory of Foreign Bank Entry	18
	The Current Position of Foreign Banks	19
	Foreign Banks: Their Impact	19
6.6	GLOBAL STRATEGIES OF AUSTRALIAN BANKS	20
	NAB	21
	ANZ	21
	Westpac	22
	CBA	23
	New Zealand Activities	23
	Reasons for a Retreat from Asia	23
6.7	BANK TAXATION AND LARGE BANK LEVIES	25
	FID and BAD	25
	Large Bank Levies Internationally	26
	The Australian Major Bank Levy	27
	The MBL and the FCS	29
	GST and Banks	30
	The challenge	30
	Why applying GST to banks makes sense	31
	Measurement difficulties	32
6.8	BANK DISCLOSURES AND MARKET DISCIPLINE	32
	Basel 2's Pillar	33
	Basel 3 Disclosures	33
	What is disclosed?	34
	Using Disclosure Statements	34
	Finding Basel 3 Disclosures	36
6.9	BANK VALUATION	36
	Valuation Methods	38
	Dividend Discount Model	39
	Hypothetical Bank Example	39
	"Multiples" Approaches	40
	Hypothetical Bank Example	40
	Net Present Value (NPV) Modelling	40
	Triangulation	44
	Recent Bank Sale Price Valuations	45
	APPENDIX 1: MERGERS IN AUSTRALIAN BANKING: A BRIEF 50 YEAR HISTORY	47
	APPENDIX 2 BANK LICENSING, REGULATION, AND PRUDENTIAL STANDARDS	49
	Main Australian Legislative/Regulatory Requirements	49
	Legislative	49

Regulatory requirements	50
Other relevant regulations and regulatory bodies.	50
APPENDIX 3 APRA STANDARDS FOR ADIS	50

7. The Hayne Royal Commission and Banking

7.1	INTRODUCTION 1	
7.2	BACKGROUND TO THE ROYAL COMMISSION	2
7.3	TYPES OF MISCONDUCT 3	
	Fees for No Service (FFNS)	4
	Sales of Unsuitable Products (including “Add-On” Insurance)	5
	“Hawking” of Financial Products	6
	Commission Payments and Remuneration Practices	7
	Claims Handling and Settlements	8
7.4	CAUSES OF MISBEHAVIOUR	9
7.5	THE RECOMMENDATIONS AND GOVERNMENT RESPONSE	11
	Responsible Lending Obligations (RLOs)	11
	Remuneration	11
	Best Interest Duties and Financial Advice	12
	Point of Sale (POS) Exemption	12
	Industry Codes of Conduct and Role of Industry Bodies	12
	Financial Consumer Protection	12
	BEAR Product Responsibility	13
	Culture and Governance	13
	Regulation and Supervision	13
	Omissions from the Recommendations	14
7.6	CONSEQUENCES FOR BANKS	15

8. Credit Providers: An Overview

8.1	INTRODUCTION 1	
	A Taxonomy of Credit Providers	4
8.2	FINANCE COMPANIES	5
8.3	SUPPLY CHAIN FINANCE 7	
	Cash and Working Capital Management	8
	Value creation from shortening the cash-cycle: an illustration	8
8.4	PAWNBROKING 12	
	A “Fair” Pawnbroking Interest Rate	14
8.5	PAYDAY LENDING AND SMALL AMOUNT CREDIT CONTRACTS (SACCS)	14
8.6	SECURITISERS	16
8.7	CONSUMER CREDIT AND BUY NOW PAY LATER (BNPL)	19
	BNPL Prospects	22
8.8	MICROFINANCE INSTITUTIONS	25
8.9	GOVERNMENT CREDIT INSTITUTIONS: THE NHFIC	26

9. Common Loan Types

9.1	INTRODUCTION 1
9.2	LINES OF CREDIT, LOAN COMMITMENTS, OVERDRAFTS 2

	Overdrafts	2
	Lines of Credit	2
	Loan Commitments	3
9.3	MORTGAGE LENDING	3
	Inflation-Indexed Mortgages	6
	Determining Mortgage Loan Interest Rates	7
	Repayment Terms	8
	Alternative mortgage options	9
	Selling Mortgage Loans	9
	Loan Pricing and Switching	10
9.4	REVERSE MORTGAGES (EQUITY RELEASE) PRODUCTS	10
9.5	CREDIT CARD LENDING	13
9.6	SYNDICATED LOANS	15
9.7	BANK ACCEPTED BILLS	17
	Bank Accepted Bill Financing Example	18
9.8	MERCHANT CASH ADVANCES	19
9.9	MARGIN ACCOUNTS / LENDING	20
	“Stormified” – A Margin Lending Case Study	21
	APPENDIX: PROTECTED (CAPITAL GUARANTEED) INVESTMENT PRODUCTS (EQUITY LOANS)	22
	APPENDIX: AN AUSTRALIAN CASE STUDY: OPES PRIME	24

10. Bank Lending and Credit Risk

10.1	INTRODUCTION	2
	Regulatory requirements	3
10.2	SOURCES OF CREDIT RISK	4
	Customer Default Risk	4
	Counterparty Credit Risk	5
10.3	CREDIT RISK ASSESSMENT AND THE LENDING PROCESS	6
	Traditional Approaches	6
	Statistical Models for Credit Assessment	8
	Logit and Probit models	9
	Machine Learning and Artificial Intelligence	9
	Fin Tech and Lending	10
10.4	CREDIT BUREAUS AND OPEN BANKING	11
	Comprehensive Credit Reporting	11
	Open Banking	13
10.5	BANK CREDIT ASSESSMENT METHODS AND LOAN MANAGEMENT	13
	Mortgage Brokers and Credit Assessment	14
	Loan Monitoring	15
	Loan Management	16
10.6	RESPONSIBLE LENDING OBLIGATIONS (RLOS)	17
	Loan Defaults and Debt Collection	19
10.7	BANK CREDIT RISK MANAGEMENT ORGANISATION	19
10.8	LOAN PRICING AND LOAN TERMS	21
	Deriving a risk-based loan interest rate	22
	Pricing Off Balance Sheet Items	26
10.9	ASSESSING PERFORMANCE OF LOAN BUSINESS UNITS	27

10.10	CREDIT RISK MODELLING	28
	The Merton Model	31
	CreditMetrics	33
10.11	CREDIT RISK MITIGATION	33
	Collateral	33
	Covenants	34
	On demand loans and non-monetary defaults	35
	Netting (Compensating Balances)	36
	Risk Transfer	36
	Credit Derivatives	36
	Lenders Mortgage Insurance (LMI)	36
10.12	LOAN TERMS AND CREDIT RATIONING	37

11. Modern Financial Instruments: Securitisation

11.1	INTRODUCTION	1
11.2	SPECIAL PURPOSE VEHICLES	2
11.3	CONDUITS AND SIVS	3
11.4	SECURITISATION AND TRADITIONAL BANKING	4
11.5	TYPES OF SECURITISATION	7
	“Traditional” Securitisation	7
	Self-securitisations	8
	Covered Bonds	9
11.6	ECONOMIC ARGUMENTS FOR SECURITISATION	10
11.7	PREPAYMENT MODELLING AND RMBS PRICING	12
	A Simpl(istic) illustration of prepayment and valuation	13
11.8	HISTORY OF AUSTRALIAN SECURITISED PRODUCTS	15
	Initial Issuers	15
	Australian ABS Growth and Size	16
	Securitisation Design and Costs	18
11.9	THE STRUCTURE OF SECURITISATION	20
	An Australian Securitisation Example: The Puma Fund	20
	Characteristics of the Notes	20
11.10	SECURITISATION AND THE FINANCIAL CRISIS	22
11.11	REGULATION OF SECURITISATION	25
11.12	AUSTRALIAN GOVERNMENT SECURITISATION INTERVENTIONS	26
	AOFM and the GFC	27
	The Covid Crisis Response, the Australian Business Securitisation Fund (ABSF) and the Structured Finance Support Fund (SFSF)	28
	APPENDIX 1: CASE STUDY: THE ABACUS DEAL	29
	APPENDIX 2: RAMS CASE STUDY	30
	APPENDIX 3: MORTGAGE STRIPS: IO’S AND PO’S	33

12. Modern Financial Instruments and Banking

12.1	INTRODUCTION	3
12.2	INDICATOR/BENCHMARK/REFERENCE RATES	4
	The LIBOR Scandal	4

	BBSW	5	
	BBSW Manipulation	6	
	BBSW Problems	6	
	The Cash Rate and AONIA	7	
12.3	OVERNIGHT INDEXED SWAPS (OIS)	8	
	Example:	9	
	OIS Uses	10	
	Cash Rate Expectations	11	
	Assessing Bank credit risk	11	
	OIS as a risk free rate	12	
12.4	CREDIT DERIVATIVES – CREDIT DEFAULT SWAPS (CDS)	14	
	CDS Settlement	16	
	CDS Premiums and Bond Credit Spreads	16	
	Global Market	17	
	Australian Market and Trading Conventions	17	
	CDS Indexes	18	
	Bank Uses of Credit Derivatives	20	
	Australian bank credit derivative use	21	
12.5	REPOS (REPURCHASE AGREEMENTS)	23	
	An Example	23	
	Repos: A Little History	24	
	Repo Characteristics	24	
	Uses (Economic Functions) of Repos	25	
	Accounting for repos	26	
	Case Study: Lehman’s notorious Repo 105s	26	
	Global Size of Repo Markets	27	
	The Australian Repo Market,	27	
	Central Bank Use of Repos	28	
	Regulation of Repos	29	
	The US Repo Market and the GFC	30	
	Repos: Some Issues	31	
	Repos and arbitrage	31	
	The “run on the repo” (Gorton & Metrick, 2012)	32	
12.6	SECURITIES LENDING	36	
	Securities Lending History (See http://www.asla.com.au/).	38	
	Uses of Securities Lending	38	
	Securities Lending and Repos	39	
	Margins and Haircuts	39	
	Gross and Net Stock Lending	40	
	Securities Lending & Short Selling	40	
12.7	COLLATERAL	40	
	Collateral and Encumbrance	41	
12.8	PRIME BROKERAGE	42	

13. Payments Systems

13.1	INTRODUCTION	2	
13.2	THE EVOLUTION OF PAYMENTS METHODS IN AUSTRALIA	6	

13.3	CASH PAYMENTS SYSTEM	9
13.4	PRICING OF PAYMENTS SERVICES: AN INTRODUCTION	11
13.4	THE ATM SYSTEM AND PRICING	12
13.5	CHEQUE PAYMENTS SYSTEM	14
13.6	DIRECT ENTRY (DEBIT/CREDIT)	16
13.7	GIRO PAYMENTS SYSTEMS AND BPAY	17
13.8	CARD SCHEMES AND INTERCHANGE FEES	18
	Electronic Payment Systems - EFTPOS	21
	Electronic Payments Systems – Four Party Schemes	23
	Three Party Schemes	25
13.9	NEW PAYMENTS PLATFORM (NPP)	26
13.10	OTHER INNOVATIONS AND ELECTRONIC WALLETS	28
	OSKO	28
	PayPal	28
	Escrow	29
	Alipay	29
	Electronic Wallets	29
	M-Pesa	29
	Crypto-Currencies	30
13.11	REGULATORY INTERVENTIONS	31
13.12	PAYMENTS SYSTEMS AND AML/CTF RISK	33
	The AML/CTF Framework	34
APPENDIX: PAYMENTS SYSTEM REGULATORY DECISIONS34		

14. International Trade and Finance Services

14.1	INTRODUCTION	1
14.2	TRADE FINANCE FACILITIES	2
	Delivery versus Payment	2
14.3	SERVICES FOR CORPORATE AND INSTITUTIONAL CLIENTS	4
	Managing Foreign Exchange (FX) exposures	4
	Foreign Bond Issuance by Australian Companies	5
	Kangaroo Bond Market Issuance	5
14.4	CORRESPONDENT BANKING	6
	A Correspondent Banking transaction example	7
14.5	INTERNATIONAL PAYMENTS ARRANGEMENTS	7
	The SWIFT Network	7
	A SWIFT message	8
14.6	REMITTANCES AND RETAIL FX TRANSACTIONS	9

15. Bank Management and FTP

15.1	INTRODUCTION	1
15.2	FUNDS TRANSFER PRICING	1
15.3	ECONOMIC THEORY AND FTP	7
15.4	DECOMPOSING NET INTEREST INCOME	8
	CASE STUDY: FTP and Bendigo Bank Community Banks	10
15.5	FTP IMPLEMENTATION AND COMPLICATIONS	11

	Maturity Buckets	11
	Bank Credit Rating and FTP spreads	11
	Product Maturity, cash flows and repricing	12
	Customer Options	13
15.6	SETTING FTP RATES AND LIQUIDITY TRANSFER PRICING	13
15.7	DEALING WITH VARIABLE RATE & INDETERMINATE MATURITY PRODUCTS	16
	Incorporating Cost of Wholesale Funding Spreads	18
	Liquidity Risk and Cost	19
15.8	TRANSFER PRICING OF EQUITY	22

16. Risk Management, Governance and Economic Capital Allocation

16.1	INTRODUCTION 1	
16.2	IDENTIFICATION OF RISKS AND THEIR SOURCES	2
16.3	ASSESSMENT OF THE SEVERITY OF THE RISK	5
16.4	MANAGEMENT OF RISK	6
	Risk Management Structures and “Three lines of defence” – Australian Banks	7
	Risk Culture	9
16.5	RISK MANAGEMENT – REGULATORY REQUIREMENTS	10
	Trading Desk Limits	10
16.6	ECONOMIC CAPITAL	11
	Economic Capital and Loss Distributions	12
	Loan loss provisioning and Economic Capital	13
16.7	AGGREGATE ECONOMIC CAPITAL AND ACTUAL CAPITAL	14
16.8	CAPITAL MANAGEMENT POLICY	17
16.9	ALLOCATING ECONOMIC CAPITAL	17
16.10	ECONOMIC CAPITAL ALLOCATION AND FTP	19
	CASE STUDY: WESTPAC CHANGES TO FTP and Economic Capital Allocation	21
	FURTHER READING ON ECONOMIC CAPITAL ALLOCATION AND CREDIT RISK	23
	APPENDIX: SETTING TRADING DESK LIMITS: AN ILLUSTRATION	23
	Numerical Example	24

17. Bank Capital Regulation

17.1	INTRODUCTION	1
17.2	BASEL COMMITTEE HISTORY	2
17.3	THE 1988 BASEL ACCORD (BASEL I)	5
17.4	BASEL II/III	
	Credit Risk – for banks using the IRB approach	11
	Credit Risk Mitigation	15
	Basel 2 consequences	16
17.5	SOME GFC BANK REGULATION LESSONS AND BASEL 2.5	16
	Regulatory Risk weight changes: Basel 2.5 (July & Dec 2009)	17
17.6	BASEL 3 (2011)	17
	Measuring Capital	18
	Higher Quality Capital	19
	Procyclicality of capital requirements and countercyclical capital buffers	19
	Capital Conservation Buffers (CCB)	20

	Leverage Ratio	20
	International comparisons	22
	Bank Funding/Intermediation Costs	22
	Increased capital levels	22
	TLAC - Total Loss Absorption Capacity	23
	A “bigness” capital charge	23
	Contingent (bail-in) capital	24
	The change in emphasis	24
17.7	THE FINALISATION OF BASEL 3 (OR BASEL 4?)	24
	Operational Risk	24
	Credit Risk	25
	Market Risk	25
17.8	APRA’S RECENT BASEL CHANGES	27

18. Bank Capital Structure

18.1	INTRODUCTION	1
18.2	A BRIEF HISTORY OF BANK CAPITAL	3
	Some Historical Facts	3
18.3	HISTORICAL AUSTRALIAN VIEWS ON THE IMPORTANCE OF BANK CAPITAL	4
18.4	BANK CAPITAL AND THE GFC	5
18.5	CAPITAL STRUCTURE THEORY: MM AND BANKING	7
	Taxation	8
	Practical Limits to Leverage	9
18.6	OPTIMAL BANK LEVERAGE	10
	Determinants of Optimal Bank Capital Structure	12
	Identifying the Socially Optimal Leverage of Banks	12
18.7	EMPIRICAL EVIDENCE ON BANK VALUE AND BANK CAPITAL	13
18.8	BANK CAPITAL PLANNING AND ADJUSTMENT	15
18.9	CAPITAL PLANNING – ICAAP REQUIREMENTS	16
18.10	RATINGS CONSIDERATIONS	17
18.11	ORGANIC CAPITAL GROWTH	18
18.12	CAPITAL ADJUSTMENT PROCESSES	20
18.13	BAIL-IN SECURITIES	22
	Objectives of the “Bail-in” regime	23
	Academic Approaches to Bail-In	24
	Bail-In Securities: Evolution and Design	26
	The “Bail-In” Market: Australia and Overseas	28
	Deficiencies of Bail-In Securities	32
	Bail-In Securities Pricing, bank capital management and market discipline	33

19 Liquidity Management and Regulation

19.1	INTRODUCTION	2
19.2	THE PERVASIVENESS OF LIQUIDITY RISK	3
	Mutual Funds and Liquidity Risk	3
	Superannuation Funds	4
	Conduits and SIVs and liquidity risk spillovers	5

19.3	LIQUIDITY DISRUPTIONS: LESSONS FROM THE GFC	5
19.4	BANK LIQUIDITY CREATION AND LIQUIDITY RISK 6	
	Sources of Bank Liquidity Risk	7
19.5	THE DIAMOND & DYBVIIG (AND OTHER) MODELS	8
	Preventing Bank Runs	11
	Other Theoretical Models	11
19.6	MANAGING LIQUIDITY RISKS	12
	Liquidity Risk Disclosures	17
	Bank Liquidity Management Theory	18
19.7	BANKING SECTOR DEPOSIT AND LIQUIDITY CREATION	19
	Measuring Liquidity Creation	20
19.8	HOW DOES THE AUSTRALIAN SYSTEM LIQUIDITY APPROACH WORK?	21
	Repo Transactions (Until March 2020)	25
	AOFM Securities lending facility	26
	The March 2020 changes and implications over 2020-2021	26
	The reversal of cash rate policy in 2022	30
19.9	BASEL LIQUIDITY REQUIREMENTS	30
	MLH regime	31
	Liquidity coverage Ratio (LCR):	31
	APRA estimate of cost of Basel 3 LCR/CLF (from RIS statement)	34
	Is the LCR well founded?	37
	Committed Liquidity Facility (CLF) – for banks subject to LCR	37
	Effects of the LCR/CLF arrangements	39
	Required Net Stable Funding Ratio (NSFR)	39
	Theoretical Underpinnings	41
	NSFR Possible consequences and issues:	41
20.	Operational Risk	
20.1	INTRODUCTION 1	
	Rogue Traders and Operational Risk	4
	AML/CTF and Operational Risk	5
	The Hayne Royal Commission and Operational Risk	6
20.2	ATTEMPTING TO QUANTIFY OPERATIONAL RISK	7
20.3	THE “NEW” BASEL APPROACH	8
20.4	THE “NEW” APRA APPROACH	9
	Smaller ADIs	10
	Larger ADIs	10
20.5	DISCRETIONARY CHANGES IN OPERATIONAL RISK CAPITAL REQUIREMENTS	12
20.6	THE RELATIVE IMPORTANCE OF OPERATIONAL RISK	14
21.	Market Risk Management & Regulation	
21.1	INTRODUCTION 1	
21.2	BANK MANAGEMENT OF MARKET RISK	2
	Managing Traded Market Risk	3
21.3	REGULATORY APPROACH	6
	Pre FRTB	6

	Post FRTB	7
21.4	TRADING DESK (BOOK) DEFINITIONS, TREATMENT AND REGULATION	8
21.5	REQUIREMENTS FOR ACCREDITATION TO USE INTERNAL MODELS APPROACH	9
21.6	INTERNAL MODELS APPROACH	11
	Regulatory Formulas	12
	Back Testing	13
21.7	THE REVISED STANDARDISED APPROACH	14
	An Illustration of the Standardised Approach	15

22. Interest Rate Risk in the Banking Book (IRRBB)

22.1	INTRODUCTION	1
22.2	THE IMPORTANCE OF IRRBB	2
22.3	SOURCES OF INTEREST RATE RISK	4
	“Riding the Yield Curve”: Profits and Risks	5
	Types of Interest Rate Exposure	5
22.4	SIMPLE TECHNIQUES FOR ASSESSING INTEREST RATE EXPOSURE	6
	Gapping	6
	Interpreting the Gap	7
	Problems with gapping	7
	Duration and the Duration Gap Approach	8
	Duration Definition	8
	Interpreting Duration	8
	Convexity	9
	Duration Gap of a Financial Institution	10
22.5	IRRBB APPROACHES USED BY MAJOR AUSTRALIAN BANKS	11
	Public Reporting	12
	APRA expectations re IRRBB risk management and Modelling	13
	A New APS117.0 for 2025 and Beyond	14
22.6	IRRBB REGULATION – BASEL APPROACH	15
22.7	REPORTING IRRBB	15
22.8	THE BASEL STANDARDISED APPROACH	16
	The ARS 117 IRRBB Reporting Template	18
22.8	MANAGING IRRBB	19

23. Financial Institution Failures: An Australian Perspective

23.1	INTRODUCTION	1
23.2	AUSTRALIAN FINANCIAL INSTITUTION FAILURES	2
23.3	FAILURES OF PRUDENTIALLY REGULATED INSTITUTIONS	3
23.4	SHADOW BANKING FAILURES	4
	Investment Vehicles and their Managers	5
	Mortgage and Property Fund Redemption Freezes	7
	Finance Companies	9
	Stockbrokers/Dealers	11
23.5	THE GFC AND FINANCIAL FAILURES IN AUSTRALIA	12

24. Prudential Supervision: Principles and Practices

24.1	INTRODUCTION	1
24.2	CORE PRINCIPLES	1
24.3	INTERNATIONAL COOPERATION	3
	Home-Host Regulatory Responsibility	3
	Legal Entity Identifier	3
	Colleges of Supervisors	4
	Trans-Tasman Council on Banking	4
24.4	SUPERVISORY APPROACHES	5
	Alternative Models	6
	Australia – APRA’S approach	7
	The USA “Camels” approach	8
24.5	STRESS-TESTS	9
24.6	PREDICTING AND IMPROVING SUPERVISORY RATINGS	11
24.7	MACRO-PRUDENTIAL REGULATION	11
	MacroPrudential Regulation in Australia	14

25. Financial Consumer Protection: Issues and Australian Experience

25.1	INTRODUCTION	1
25.2	WHY FINANCIAL CONSUMER PROTECTION?	3
25.3	FORMS OF FINANCIAL CONSUMER PROTECTION	4
	Measures protecting consumers from unsuitable financial contracts	4
	Measures to improve the quality of financial products and services available	4
	Measures to reduce potential losses to financial consumers when bad outcomes occur	5
	Measures to substitute for individual legal action to resolve problems	5
	Regulatory Structures and Complexities	5
25.4	A WIDE RANGE OF ISSUES - EXAMPLES	6
25.5	INTERNATIONAL DEVELOPMENTS	9
25.6	ALTERNATIVE PHILOSOPHIES AND APPROACHES	10
25.7	CHALLENGES IN THE DESIGN OF FCP POLICIES	14
25.8	ROYAL COMMISSION AND COMPENSATION SCHEME OF LAST RESORT	17
25.9	CONCLUSION	18

26. Deposit Insurance and Bank Resolution

26.1	INTRODUCTION	1
26.2	THE AUSTRALIAN FINANCIAL CLAIMS SCHEME (FCS)	3
	The Wholesale Debt Guarantee of the GFC	5
	NZ approach	6
26.3	THEORY	6
26.4	DEPOSIT INSURANCE CHARACTERISTICS	12
26.5	MERTON’S (1977) DERIVATION OF VALUE OF DEPOSIT INSURANCE	15
	Applying Merton’s Approach	16
26.6	DEPOSIT INSURANCE SCHEME PRICE AND COVERAGE: INTERNATIONAL COMPARISON	17
	Recent Relevant Developments	20
26.7	DEPOSIT INSURANCE PRICING; DEPOSITOR PREFERENCE AND AUSTRALIA	20
	Depositor Preference Types	21

	Amending the Merton Model for Depositor Preference	23
	Consequences	26
	Complications	26
	Australian Pricing Results	27
	Ex ante v ex post premium payments	27
	Systemic Risk and Deposit Insurance Premiums	28
26.8	BANK RESOLUTION	28
26.9	APRA'S "NEW" RESOLUTION POWERS	29
	Regulatory Accountability	32
26.10	TRANS-TASMAN BANKING REGULATION AND SUPERVISION	33
26.11	MULTINATIONAL BANKS, G-SIFIS, AND RESOLUTION	34

27 The Post GFC Regulatory Agenda

27.1	INTRODUCTION 1	
27.2	ORIGINS AND FEATURES OF THE GFC	2
	Origins	2
	Financial Sector Shortcomings Identified by the GFC	3
	Short Term Regulatory Responses	4
27.3	THE G20 AGENDA	5
27.4	THE CURRENT (2023) STATUS OF FINANCIAL REGULATORY REFORM	6
27.5	MACRO-PRUDENTIAL REGULATION	7
27.6	SIFIS	9
	The Rationale for the SIFI Framework	9
	Identifying SIFIs: The Indicator Approach	10
	TLAC Requirements for SIFIs	11
	Regulatory Consequences for G-SIBs	12
	Australian D-SIBs.	13
	Systemically Important Insurers:	13
27.7	CENTRAL CLEARING COUNTERPARTIES (CCPS)	13
	Introduction	14
	Australian requirements	15
	Australia and OTC derivatives	16
	Issues in CCP design, risk and regulation	17
	The CCP Failure Issue	17
	Cross Currency Swaps and CCPs	19
	CCIRS	20
	CCIRS Features	21
	The Duffie – Zhu analysis	22
	The Model	23
27.8	SYSTEMIC RISK	24
	How is systematic risk measured?	25