

PROPERTY BOOM AND BANKING BUST

The Role of
Commercial Lending
in the Bankruptcy of Banks

Colin Jones
Stewart Cowe
Edward Trevillion



WILEY Blackwell

Property Boom and Banking Bust

Property Boom and Banking Bust

The Role of Commercial Lending
in the Bankruptcy of Banks

Colin Jones

Professor of Estate Management

The Urban Institute

Heriot-Watt University

Stewart Cowe

Formerly Investment Director

Real Estate Research and Strategy

Scottish Widows Investment Partnership

Edward Trevillion

Honorary Professor

The Urban Institute

Heriot-Watt University

WILEY Blackwell

This edition first published 2018
© 2018 John Wiley & Sons Ltd

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by law. Advice on how to obtain permission to reuse material from this title is available at <http://www.wiley.com/go/permissions>.

The right of Colin Jones, Stewart Cowe, and Edward Trevillion to be identified as the authors of this work has been asserted in accordance with law.

Registered Offices

John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, USA
John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

Editorial Office

9600 Garsington Road, Oxford, OX4 2DQ, UK

For details of our global editorial offices, customer services, and more information about Wiley products visit us at www.wiley.com.

Wiley also publishes its books in a variety of electronic formats and by print-on-demand. Some content that appears in standard print versions of this book may not be available in other formats.

Limit of Liability/Disclaimer of Warranty

While the publisher and authors have used their best efforts in preparing this work, they make no representations or warranties with respect to the accuracy or completeness of the contents of this work and specifically disclaim all warranties, including without limitation any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives, written sales materials or promotional statements for this work. The fact that an organization, website, or product is referred to in this work as a citation and/or potential source of further information does not mean that the publisher and authors endorse the information or services the organization, website, or product may provide or recommendations it may make. This work is sold with the understanding that the publisher is not engaged in rendering professional services. The advice and strategies contained herein may not be suitable for your situation. You should consult with a specialist where appropriate. Further, readers should be aware that websites listed in this work may have changed or disappeared between when this work was written and when it is read. Neither the publisher nor authors shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

Library of Congress Cataloging-in-Publication Data

Names: Jones, Colin, 1949 January 13– author. | Cowe, Stewart, author. | Trevillion, Edward.
Title: Property boom and banking bust : the role of commercial lending in the bankruptcy of banks / Colin Jones, Stewart Cowe, Edward Trevillion.
Description: Hoboken : Wiley-Blackwell, 2017. | Includes bibliographical references and index. |
Identifiers: LCCN 2017031759 (print) | LCCN 2017043453 (ebook) | ISBN 9781119219200 (pdf) | ISBN 9781119219217 (epub) | ISBN 9781119219255 (paperback)
Subjects: LCSH: Real estate investment. | Commercial real estate. | Mortgage loans. | Financial institutions—Real estate investments. | Banks and banking. | Global Financial Crisis, 2008–2009. | BISAC: BUSINESS & ECONOMICS / Real Estate.
Classification: LCC HD1382.5 (ebook) | LCC HD1382.5 .J666 2017 (print) | DDC 332.109/0511–dc23
LC record available at <https://lcn.loc.gov/2017031759>

Cover Image: © MarianVejcik/Gettyimages
Cover Design: Wiley

Set in 10/12pt Warnock by SPi Global, Pondicherry, India

To Fiona and Louyse for their patience and understanding during the preparation of this manuscript.

For Margot for her constant support over many years and to Adriana who encouraged me to put pen to paper.

Contents

List of Figures *ix*

Acknowledgements *xi*

Glossary *xiii*

- 1 Introduction 1**
 - Sub-prime Lending Enters the Financial Vocabulary 2
 - The Global Extension 5
 - Commercial Property Market Context 6
 - Commercial Property's Role in the Wider Economy 13
 - Property Investment and Short-termism 14
 - Measuring Commercial Property Market Performance 14
 - Book Structure 16
- 2 Long-term Changes to Property Finance and Investment 21**
 - The Changing Role of the Banks in the United Kingdom 21
 - Property Development and Investment Finance 25
 - The Changing Investment Landscape of the Non-banking Financial Institutions 29
 - The Other Main Players in Commercial Property 30
 - The Changing Face of Institutional Property Investment 31
 - Limited Partnerships 34
 - Jersey Rides to the Rescue 37
 - Unit Trusts and Indirect Investment 39
 - Conclusions 41
- 3 Economic Growth, Debt and Property Investment through the Boom 43**
 - Global Economic Upturn and Debt Accumulation 43
 - The Property Boom and Escalating Debt 46
 - The Cost and Role of Debt 52
 - Development and its Finance in the Noughties Boom 57
 - The Weight of Money and Moving up the Risk Curve 61
 - Conclusions 63
- 4 The Anatomy of the Property Investment Boom 65**
 - Commercial Property, the Macroeconomy and Globalization 66
 - Global Property Upswing 68
 - Market Trends in the Property Boom – Was Something Different this Time? 71

	UK Investment Trends	76
	Lending To Commercial Property in the United Kingdom	82
	A Property Boom in an Irrational Market	83
	Summary and Conclusions	88
5	The Global Financial Crisis and its Impact on Commercial Property	91
	A Crisis Unfolds	92
	The Impact on Global Property Markets	95
	Capital and Rental Values in the United Kingdom Post 2007	98
	But This Time the Bust Was Also Different	100
	Investment Trends and Capital Value Falls	106
	Changing View of Risk	112
	Summary and Conclusions	114
6	Property Lending and the Collapse of Banks	117
	The Crumbling of the UK Banking System	118
	Royal Bank of Scotland	121
	Halifax Bank of Scotland	122
	Britannia Building Society and the Co-operative Bank	130
	Dunfermline Building Society	131
	Irish Banking Collapse	132
	US Experience	136
	Discussion and Conclusions	139
7	Aftermath and Recovery	143
	The Macroeconomic Context	144
	Property Market Trends	147
	Bad Bank Debts and Impairments: The Road to Redemption	151
	The Response of Property Investors, Property Funds and Property Companies	158
	Property Lending Post-GFC	161
	Implications for the Pricing of Commercial Property and Investment	162
	Conclusions	166
8	Conclusions	169
	Globalization	171
	The Boom and Bust through the Prism of Valuations	173
	Role of Banking	173
	Irrational Exuberance	174
	Could It Happen Again?	176
	What Can Be Done?	177
	Final Thoughts	179
	References	181
	Index	191

List of Figures

- 1.1 Nominal and real capital value growth 1971–1977 9
- 1.2 Nominal and real capital value growth 1987–1997 11
- 1.3 Real commercial property capital values 1981–2010 (1981 = 100) 16
- 2.1 Quarterly cash flow into specialist (retail) real estate funds, 2001–2007 39
- 3.1 Global debt outstanding in 2000 and 2007 broken down by sector 46
- 3.2 Commercial property capital growth in selected countries 47
- 3.3 Total property debt as a percentage of invested stock in different parts of the world 1998–2009 47
- 3.4 Commercial real estate lending as a percentage of annual UK GDP 1970–2011 48
- 3.5 Annual bank lending for property in the United Kingdom 2000–2010 48
- 3.6 International sources of bank lending in the United Kingdom 2004–2010 49
- 3.7 Bank base rates and 5-year swap rates 2000–2010 52
- 3.8 Average interest rate margins for bank lending to commercial property 2002–2011 53
- 3.9 Average interest rate margins on prime and secondary retail properties 2002–2012 54
- 3.10 Differences between initial yield and funding costs 2000–2010 55
- 3.11 Average maximum loan to values on commercial property lending by banks 2002–2012 56
- 3.12 Office development in London 1985–2011 59
- 3.13 Annual retail warehouse space completed 1993–2014 60
- 3.14 Annual completions of town centre and out-of-town shopping centres 1965–2014 60
- 4.1 Annual US economic growth and commercial property returns 1978–2014 66
- 4.2 Annual UK economic growth and commercial property returns 1978–2014 67
- 4.3 Commercial property capital growth in selected countries 2000–2009 70
- 4.4 Long-term capital and rental value growth patterns 1975–2015 72
- 4.5 Annual contributions to capital growth 1981–2007 73
- 4.6 Quarterly capital and rental value growth in the retail sector 2000–2009 74
- 4.7 Quarterly capital and rental value growth in the office sector 2000–2009 75
- 4.8 Quarterly capital and rental value growth in the industrial sector 2000–2009 75
- 4.9 Net quarterly institutional investment into commercial property, 2001–2009 76
- 4.10 Net quarterly institutional investment in the UK property sectors, 2001–2009 77

- 4.11 Indices of the annual real value of institutional purchases by property sector 1981–2010 78
- 4.12 Indices of the annual real value of institutional sales by property sector 1981–2010 78
- 4.13 Value of commercial property transaction volumes, 2000–2009 79
- 4.14 Weighted average yield of property purchased by investors compared to the market average in 2006 81
- 4.15 Patterns in retail sales of property fund units to investors and commercial property values, 2000–2009 82
- 4.16 Yield gap between yields on gilts and commercial property, 2001–2009 86
- 5.1 Office yields in the United Kingdom and Western Europe 2007–2015 96
- 5.2 Office yields in EMEA countries and the Americas 2007–2015 96
- 5.3 Yield trends in the Asia Pacific region 2007–2015 97
- 5.4 Indexed capital value and rental value change in the UK property market 2000–2014 99
- 5.5 Indexed capital value change by sector, 2000–2009 101
- 5.6 Contributions to capital growth, 2000–2009 103
- 5.7 Peak to trough change in capital values by length of unexpired lease 105
- 5.8 Peak to trough changes in capital values by asset quality defined by value 105
- 5.9 Net investment by financial institutions by property sector, 2006–2014 106
- 5.10 Transaction volumes in the commercial property market 2000–2015 108
- 5.11 Market and valuation yields, 2007–2010 110
- 5.12 Yield Spreads of Sales by Investor Types, 2007–2009 111
- 5.13 Quarterly cash flow into specialist (retail) real estate funds 2000–2015 112
- 5.14 Yield gap between gilts and commercial property, 2001–2009 113
- 6.1 Major UK banks' customer funding gap, 2000–2008 119
- 6.2 HBOS property and property related exposures, drawn balances at November 2008 125
- 6.3 HBOS impaired loans as a percentage of year-end loans and advances, 2000–2009 127
- 6.4 HBOS monthly impairment losses charged to the income statement in 2008 127
- 7.1 Actual and forecast 10-year gilt yield gaps, 1987–2013 165
- 7.2 Actual and forecast index-linked gilt yield gaps, 1987–2013 166

Acknowledgements

We thank MSCI for permission to use its data on worldwide property trends. We also thank Property Data for permission to use their UK transactions data. Both of these data sources represent the essential empirical base for the book. We also acknowledge the support of CBRE, the De Montfort UK Commercial Property Lending Survey, the Investment Property Forum and Real Capital Analytics in giving permission to reproduce figures from their reports.

Glossary

APUT Authorised property unit trust – a means by which personal investors can access and invest in the property market.

BASEL III The Basel international agreements relate to common global standards of capital adequacy and liquidity rules for banks. These were first introduced in 1988. Since 2013, the amount of equity capital that banks are required to have has been significantly increased by BASEL III.

Fannie Mae Fannie Mae is a US government sponsored enterprise originally set up in 1938. It operates in the ‘secondary mortgage market’ to increase the funds available for mortgage lenders to issue loans to home buyers. It buys up and pools mortgages that are insured by the **Federal Housing Administration** (see below). It finances this by issuing mortgage-backed debt securities in the domestic and international capital markets.

Federal Housing Administration The Federal Housing Administration is a US government agency created in 1934. It insures loans made by banks and other private lenders for home building and home buying.

Freddie Mac Freddie Mac is a US government sponsored enterprise established in 1970 to provide competition to Fannie Mae and operates in the same way.

lending margins The difference between the rates banks charge to borrowers and that paid (usually) on the wholesale markets or to savers.

limited partnership A partner in a limited partnership has limited liability but normally has a passive role in management. There is also a manager who decides the investment policy of the partnership.

liquidity Liquidity is the ability to transact quickly without causing a significant change in the asset’s price. Property tends to be considered illiquid, not least because of the time taken for a transaction.

NAMA The National Asset Management Agency was established in 2009 by the Irish government as one of the initiatives taken to address the crisis in Irish banking. It took over the bad property loans from the Irish banks in an attempt to improve the management of credit in the economy.

OECD The Organisation for Economic Co-operation and Development (OECD) comprises a group of 34 countries that includes all Western countries. It was set up in 1961 to promote policies that improve economic and social well-being in the world.

off balance sheet It refers to the ability to place assets and liabilities off a company's balance sheet.

open ended funds A collective investment vehicle where the number of shares or units can be increased or decreased according to cash flow into and out of the fund.

pre-let A pre-let is a legally enforceable agreement for a letting to take place at a future date, often upon completion of a development.

REIT A Real Estate Investment Trust is a listed company which owns and manages (generally) income producing real estate and which is granted special tax measures (i.e. income and capital are paid gross of tax with any tax being paid according to the shareholder's tax position).

retail fund An open-ended fund that invests funds which are derived from selling units primarily to individual investors.

rights issue A rights issue occurs when a company issues more shares and its existing shareholders have the initial right to purchase them.

securitization This is the practice of pooling assets (often commercial/residential mortgages) and selling, usually bonds, with interest payments to third party investors. The interest payments on these securities are backed by the income from the mortgages.

sovereign debt crisis The failure or refusal of a country's government to repay its debt (interest payments or capital) in full is a sovereign debt crisis.

upward only rent review A typical lease may have points in time in the future when the rent is due for review. An upward only rent review is the term used to describe a situation in which the rent payable following a review date cannot be reduced (even if market rents have generally fallen since the last review).

1

Introduction

Two shots from Gavrilo Princip's semi-automatic pistol at Sarajevo set in train a complex chain of events that lead to the First World War (Taylor, 1963). Commentators writing on the assassination of Archduke Franz Ferdinand of Austria-Hungary and his wife Sophie on the 28 June 1914 could not have imagined that this 'local difficulty' would rapidly escalate, develop into the world's first global conflict and cost the lives of an estimated 17 million combatants and civilians. It would also sweep away the remnants of three empires, bring about the decline of monarchies, instigate the rise of republicanism, nationalism and communism across large swathes of Europe and change the social fabric forever (Strachan, 2001; Taylor, 1963).

Almost a century later, financial commentators reviewing the failure of New Century Financial, one of the largest sub-prime lenders in the United States, which filed for Chapter 11 bankruptcy protection on the 2 April 2007, could not foresee that this local problem would escalate and develop into the world's first truly global financial crash and almost see the ending of the capitalist system as we know it. It was to cost unprecedented billions of pounds, euros, dollars and just about every other major currency in attempts to address the issue.

The Great War had a defined start and conclusion. It formally began with the Austro-Hungarian declaration of war on Serbia on 28 July 1914, which then drew in other countries owing to a series of alliances between them. Hostilities formally ceased on Armistice Day on 11 November 1918. But despite that cessation of hostilities, not all the contentious issues were addressed at the ensuing Versailles peace conference. Many consider the outbreak of the Second World War two decades later to be a direct consequence of the flawed decisions made at Versailles (Strachan, 2001; Taylor, 1963).

Fast forward a century and the timing of the global financial crisis (GFC) cannot be quite so precisely stated. There was no single action or event that one can say triggered the crash, nor has there been a point in time – so far – when we can say that the crash is now finally behind us. We can certainly agree that not all financial hostilities have ceased, even a decade on, and we still remain years away from a complete return to normality. Austerity still lingers on for millions, and many governments are still printing money in an attempt to kick-start growth while the living standards for those in the worst affected countries remain at depressed levels. And in a striking comparison with the Great War, one wonders whether decisions made in the heat of the financial battle will not create a lasting peace but merely represent unfinished business prior to another major financial crisis erupting.

The banks were at the forefront of criticism over the scale of the crisis – and justifiably so – with their lax underwriting standards and their ineffective weak response to the crisis. But at the heart of the problem was the banks' interaction with commercial and residential property, their questionable lending practices, their almost casual disregard for risk and their creation of complex and barely understood financial products which pushed the risk out into an unsuspecting world.

This book seeks to lay bare the role of property – primarily commercial – in what became known as the global financial crash, explaining the rationale behind the banks' lending decisions and highlighting the changing emphasis on property on the part of both investors and lenders. While many excellent books have been written extolling the faults of the banking system and exposing the gung-ho policies of the bankers, fewer have looked at the specific role real estate played in the crash. This book addresses that omission.

This chapter begins by looking at how sub-prime lending evolved and not only led to the demise of the lenders of this product in the United States but also brought the international banking system to its knees in the GFC. It then explains the historical commercial property market context to the banking collapse and in particular the dynamics and role of property cycles. The next section discusses the role of commercial property in the macroeconomy, highlighting the interaction between the two. In the following section, the emergence of investment short-termism is considered with its potential consequences. The penultimate section explains some prerequisites for the analysis of property market trends presented in subsequent chapters. Finally, the book structure is explained in detail.

Sub-prime Lending Enters the Financial Vocabulary

While the housing market downturn in the United States was the critical event which ultimately lead to the onset of the global financial crash, the residential property markets played a less significant role in the rest of the world. As we will read in later chapters, it was exposure to the commercial property markets and an over-reliance on 'wholesale' funding via global capital markets that precipitated the crisis in the United Kingdom and other Western economies. However, to set the scene on the contributing factors to the global crash, it is important to explain why sub-prime lending was such an issue and how problems in that market spilled over to the derivative markets and thence to the wider world.

Prior to 2007, few commentators beyond the United States had heard of the term 'sub-prime'. Events would soon propel the term into the forefront of common usage, but in a less than flattering way. Sub-prime lending, at the outset, was the consequence of a genuine attempt to broaden the scope of mortgage provision in the United States and promote equal housing opportunities for all. Unfortunately in their quest to engage the wider population, lenders targeted more and more inappropriate customers: those with a poor credit history, those with job insecurity or even those without a job. Not for nothing were these loans called NINJA loans (no income nor job nor assets). It is useful to look at the US experience in some detail.

These sub-prime mortgage loans generally took the form of a '2–28' adjustable rate mortgage involving an initial 'teaser' mortgage rate for two years followed by an upward

resetting of the mortgage rate for the remaining 28 years. The mortgages were sold on the premise of rising house prices and customers were offered the prospect of refinancing the mortgage (possibly with a mainstream lender) at the end of the initial two-year period if they could demonstrate an improvement in their financial position and credit rating. Regular repayment would support the household to rebuild its credit rating. Not all could, of course, and borrowers in that category would remain on a sub-prime mortgage but at considerably higher mortgage rates.

It was the sheer scale of the sub-prime market that propelled the crisis into one of major proportions. Sub-prime mortgages were relatively rare before the mid-1990s but their use increased dramatically in the subsequent decade, accounting for almost 20% of the mortgage market over the period 2004–2006, and that percentage was considerably higher in some parts of the United States (Harvard University, 2008). But it was not just the volume of sub-prime mortgages in force that was the problem: it was the number of mortgages which were due to have reset rates in 2007 and 2008. Not only would these mortgagees face higher rates from the reset but general interest rates were rising, compounding the problem.

Even before the full impact of the housing market downturn became evident, defaults on the sub-prime loans were rising. By the end of 2006, there were 7.2 million families tied into a sub-prime mortgage, and of them, one-seventh were in default (Penman Brown, 2009). In the third quarter of 2007, sub-prime mortgages accounted for only 6.9% of all mortgages in issue yet were responsible for 43% of all foreclosure filings which began in that quarter (Armstrong, 2007).

The effect on the US housing market was profound. Saddled with a rising number of mortgage defaults and consequential foreclosures by the lenders, house prices collapsed. Once these house price falls had become entrenched in the market, further defaults and foreclosures occurred in recently originated sub-prime mortgages where the borrowers had assumed that perpetual house price increases would allow them to refinance their way out of the onerous loan terms. A growing number of borrowers who had taken out sub-prime mortgages and/or second mortgages at the peak of the market with 100% mortgages found themselves carrying debt loads exceeding the values of their homes. In other words they had *negative equity* in their homes, meaning their homes were worth less than their mortgages, rendering refinancing impossible. It also made selling the homes difficult because the proceeds would fall short of outstanding debt, forcing the sellers to cover the shortfall out of other financial resources, which many did not have. If they tried to sell and were unable to make good the deficit, the loan was foreclosed and the house sold. Sub-prime default rates had increased to 13% by the end of 2006 and to more than 17% by the end of 2007. Over the same period, sub-prime loans in foreclosure also soared, almost tripling from a low of 3.3% in mid-2005 to nearly 9% by the end of 2007 (Harvard University, 2010).

By September 2008, average US housing prices had declined by over 20% from their mid-2006 peak. At the trough of the market in May 2009, that fall had increased to over 30% (Jones and Richardson, 2014). This major and unexpected decline resulted in many borrowers facing negative equity. Even by March 2008, an estimated 8.8 million borrowers – almost 11% of all homeowners – were in that category, a number that had increased to 12 million by the end of the year. By September 2010, 23% of all US homes were worth less than the mortgage loan (Wells Fargo, 2010). As the housing and mortgage markets began to unravel, questions were being asked about whether

the damage would be confined to the housing market or whether it would spill over into the rest of the economy. No one knew at that stage just how the rest of the economy would suffer.

There was not long to wait for the answers to these questions. The reduction in house prices, bad as it was, had a consequential hit on the financial system through its impact on a process known as securitization that expanded significantly in the decade leading up to the GFC. Securitization involves the parceling together of many mortgages to underwrite the issue/sale of bonds to investors whose interest would be paid from the mortgage repayments. Securitization has three benefits for an issuing bank: it generates fee income by selling the resultant bonds to other institutions; it creates a secondary market out of what were illiquid mortgage assets; and, just as importantly, it moves these mortgages ‘off balance sheet’, which lowers the banks’ capital requirements. This in turn allows the income generated from the sale of the bonds to expand a bank’s lending.

Mortgage lending banks and companies sold bond packages of mortgages, known as residential mortgage-backed securities (RMBSs), to whichever institution its marketing team could attract as a way of raising funds on the wholesale market. These purchasing institutions were not just US domestic institutions, they were global, and so the seeds of the global financial crash were sown. These securitized bonds were structured so that the default risks attaching to the underlying mortgage loan and the originating lender were transferred to the bond holder. To make them therefore more marketable bond issuers usually arranged further add-ons in order to reduce the risk to the purchaser by improving the credit standing of the bond. These extras were default insurance providing credit enhancement. Incorporating these into the bond allows them to be granted a positive credit rating by specialist ratings agencies. This in turn allows companies to issue the bonds at lower interest rates, that is, at higher prices.

The purchasers of the bonds were provided with reassurance that the borrower would honour the obligation through *additional collateral*, a third-party guarantee or, in this case, insurance. In the United States this was undertaken by guarantees from insurance companies known as ‘monoline insurers’ (the United States only permits insurers to insure one line of business, hence the term). Because of their specialism these companies were typically given the highest credit rating, AAA, defined as an exceptional degree of creditworthiness. These monoline companies provided guarantees to issuers. This credit enhancement resulted in the RMBS rating being raised to AAA because at that time the monoline insurers themselves were rated AAA. Any RMBS these insurers guaranteed inherited that same high rating, irrespective of the underlying composition of the security.

These practices were considered sufficient to ensure that default risks were fully covered, and during the boom years leading up to 2007 few investors paid much regard to the risks, anyway. By the end of 2006, these mortgage securitization practices were beginning to unravel. It was finally dawning on investors that their portfolios of sub-prime mortgages and the derivatives created from them were not as ‘safe as houses’ and that they could well be sitting on significant financial losses. The truth was that sub-prime lending was not adequately monitored in spite of many senior people at the Federal Reserve and the Treasury having commented that this was a disaster waiting to happen (Penman Brown, 2009). Indeed, consumer protection organizations and

university sponsored studies had repeatedly produced critical surveys of the practice from as far back as 1995 (Penman Brown, 2009).

The security provided by default insurance also proved to be illusory. The size of this insurance market was huge and the insurers were undercapitalized. At the end of 2006, Fitch (one of the credit ratings agencies) estimated that the largest 10 monoline insurers had over \$2.5 trillion of guarantee insurance on their books, compared with cumulative shareholder funds of less than \$30 billion (Fitch Ratings, 2007). These figures included all insurance business and not just mortgage bond insurance, although the latter would have accounted for a sizeable proportion of the total. The reserves of the insurers were grossly inadequate to cope with the volume of claims that emerged from 2007. The result was that the confidence in many of these financial products that had been created was decimated and valuations collapsed. The resale market of these bonds became moribund and new sales impossible.

It had become apparent just how damaging the downturn in the US housing market had come to be, not just in terms of the human misery and hard cash of the American households affected but also for the banks. And it was not just the US financial institutions which were affected; the process of selling on these securitized bonds to any interested buyer had ensured that the risk was pushed out to the wider world. The RMBS structure resulted in a transfer of the credit risk from the originating lender to the end investor – a critical factor in the credit crunch that was to ensue. That transfer of risk would not have been quite so problematical were these end investors actually able to identify, assess and then quantify the risks. But such were the complexities of these securities that it was almost impossible for anyone to do so, and no one could differentiate between the 'good' and 'bad', so all were tainted.

We know now the recklessness of some of these securitization practices. In monetary terms, they proved to be far more serious and far-reaching than the recession that could have resulted from merely a housing crisis. Not only did they magnify the extent of the problem but they moved the financial consequences away from the original players, turning the local US sub-prime problem into one of global proportions. And the biggest concern of all was that the securitization processes embroiled hundreds of financial institutions, none of which actually knew what their exposures (or potential losses) were.

The Global Extension

When evidence of the financial crisis first emerged in the summer of 2007, followed by the collapse of the Northern Rock bank in the United Kingdom in the September of that year, many (in particular, Continental European commentators) believed that the crisis created in the United States was a problem that would be confined only to the United States and to the United Kingdom. For a while, European institutions and regulators denied the existence of any problems in their markets. But as evidence grew of the increasing nature of the troubles, particularly through widespread participation in the securitization markets, it became clear that few countries across the world would be unscathed from the financial fallout. In fact most European countries were affected as the GFC took hold.

In quick succession, the European Central Bank (ECB) was forced into injecting almost €100 billion into the markets to improve liquidity, a Saxony based bank was

taken over and the Swiss bank UBS announced a \$3.4 billion loss from sub-prime related investments. The news from the United States was equally grim. Citigroup and Merrill Lynch both disclosed huge losses, forcing their chief executives to resign, while in a truly depressing end to 2007, Standard and Poors downgraded its investment rating of several monoline insurers, raising concerns that the insurers would not be able to settle claims. If anyone had any doubts as to the severity of the crisis, the events in the closing months of 2007 surely laid them bare. The banking authorities responded by taking synchronized action. The US Federal Reserve, the ECB and the central banks of the United Kingdom, Canada and Switzerland announced that they would provide loans to lower interest rates and ease the availability of credit (see Chapter 3 for how the story subsequently unfolded).

The later, but connected, sovereign debt problems encountered, initially and most severely, by Greece, but also by Portugal, Italy, Ireland and Spain, were a direct consequence of the crash. At the time of writing, the Greek debt crisis remains unresolved despite the harsh austerity demanded by the 'troika' (the European Commission, the IMF and the ECB) in exchange for the release of 'bailout' funds. The Greek economy in 2016 had shrunk by quarter from its pre-GFC level and unemployment was 24% after three funding bailouts. At the same time the nation's debt continues to grow (Elliot, 2016).

Commercial Property Market Context

The GFC is at the core of the book, with a focus on the associated commercial property boom in the lead up to the crisis and the subsequent bust, including the role of the banks and its consequences. The book takes an international perspective but draws heavily on the UK experience. This section sets the scene by considering the historical commercial property market context, including property's role as an investment and the significance and dynamics of cycles.

Traditionally, commercial property was regarded as primarily a place to conduct business. It was only in the 1950s that commercial property became a key investment medium (Scott, 1996; Jones, 2018). By the early 1970s, the commercial property investment sector consisted of not much more than city centre shops and offices, town shopping centres and industrial units which accommodated the many manufacturing operations around the country. These segments reflected the localities and premises of conducting business at that time. But the nature of cities was about to see a dramatic upheaval.

The period from the mid-1970s onwards witnessed major economic changes in the United Kingdom, seen in the decline of manufacturing and the growth of services and a major urban development cycle stimulated by the growth of car usage and new information communication technologies (ICTs). This led to the rise of alternative out-of-town retailing locations and formats such as retail warehouses along with the advent of retail distribution hubs and leisure outlets (Jones, 2009). Developments in ICT in particular have resulted in the obsolescence of older offices, replacement demand and provided greater locational flexibility (Jones, 2013). These changes brought property investors new classifications of property, such as retail warehouses and retail parks, out-of-town shopping centres, distribution warehouses and out-of-town office parks. Many firms, both large and small, also elected to invest cash flow into their business