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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 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.

Property Boom and Banking Bust: The Role of Commercial Lending in the Bankruptcy of Banks,
First Edition. Colin Jones, Stewart Cowe, and Edward Trevillion.

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 a 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 subprime 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 subprime 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 activities rather than in the bricks and mortar supporting them by effecting sale and leaseback deals or even full sale of their premises, thereby providing further opportunities for outside investment in property assets.

Property as an investment class differs from the mainstream classes of equities and bonds on several counts, one of which is its liquidity, or more precisely, its lack of liquidity. Unlike its equity and bond cousins, transactions in which can be completed at times almost instantly, buying and selling property (both residential and commercial) can take an age. Equally, it is not easy to switch off the development pipeline when conditions deteriorate. At times these two attributes do not lie easily with investors, and they often give rise to extremely volatile investment performance and cycles. This volatility was never more evident than during the run up to the global financial crash and during the subsequent bust. But that commercial property boom and bust period was not the first in recent memory, nor will it be the last!

Commercial property has a long history of cycles. Much of property's volatility is down to variations of supply and demand during an economic cycle. In times of economic growth and when confidence is high, occupational demand for new space rises, which in turn pushes up rents because of lack of suitable supply. This in turn attracts investors and stimulates new development, but because of development time lags continuing shortages see further rises in rents and capital values. However, as has been the way over much of the past, if too much new development (particularly of a speculative nature) coincides with an economic slowdown or a recession, these new buildings fail to find tenants and so the next property downturn begins (Barras, 1994; Jones, 2013).

Investment activity and the variability in the accessibility of finance is a critical element in this classic model of a property cycle. The ready availability of borrowing and equity capital amplifies the upturn supported by relaxed lending criteria that enables investors by being highly geared to make large profits. The availability of credit also contributes to stimulating speculative bubble effects that inflate capital values and transaction activity. Liquidity in the property market increases during this period with rising values and positive investment sentiment, so that selling will be relatively easier, encouraging profit taking (Collett, Lizieri and Ward, 2003; Jones, Livingstone and Dunse, 2016). Some, at least, of the initial unwilling sellers will be assuaged by the rising values. The downturn is similarly exaggerated as banks become more risk averse as properties they have funded in the boom lie empty and hence property developers default on their loans. The consequence is that there is a famine of credit for a number of years following the downturn (Jones, 2013, 2018).

An important dimension of investment is the relationship between gearing, risk and return. The concept of gearing, called leverage in the United States, is basically using other people's money to invest and make a profit, or to be more precise, borrowing other people's money to invest. This is a key concept in explaining the dynamics of a commercial property cycle.

Two types of gearing can be distinguished – income and capital. Income gearing relates to the proportion of trading profit accounted for by interest on loans. Capital gearing measures the proportion of total capital employed that is debt capital. The two are clearly related as higher capital gearing means greater interest payments. Essentially, if an investor is highly geared, when the economy/property market is growing and interest rates are relatively low, the returns will be high. However, the investor's position changes dramatically when the economy/market turns down as the gearing effect is magnified in the reverse direction, and profits are often turned into losses. The chapter now reviews property cycles in practice, beginning with a detailed examination of the United Kingdom, where they are well documented, before then considering the wider global context.

Past UK Experience

In the United Kingdom there have been a number of boom and busts since the Second World War. A significant property boom occurred in the 1950s with Britain in critical need of new commercial premises following the devastation of the war. With the physical rebuilding of the country, the United Kingdom was also moving away from an economy rooted in heavy engineering to one more linked to the service sector. New office space was urgently needed, especially in London, and to a lesser extent modern retail space was also in short supply. In the initial years of this boom there was little development risk as bomb sites were plentiful, contracts were invariably tendered on a fixed price basis and both interest rates and inflation were low, while on completion there was a high demand for office and retail space.

Developers typically obtained short-term finance for the site purchase and for the cost of construction from the major banks (who equally regarded this form of lending as virtually risk free). Once the property was completed and let, the developers generally replaced the short-term finance with longer term fixed-rate finance from the insurance companies. As explained in Chapter 3, the banking model at that time focused on the provision of short-term finance only, hence the requirement to look elsewhere for this longer term finance. At that time, the rental income of completed properties was typically above the cost of borrowing, so these projects were mainly self-financing. In the early years, development profits were generally high as development gains were free from tax (Fraser, 1993; Jones, 2018).

The construction boom lasted for almost a decade, but this highly profitable period for the developers came to a natural conclusion at the beginning of the 1960s. The low barriers to entry attracted a raft of new players, increasing competition for the dwindling stock of available sites, which increased acquisition costs and lowered profits. The changing balance between supply and demand also brought an end to the excessive profits. A recession in 1962 further cut demand, and the office development boom in London was brought to an end two years later when Harold Wilson's new Labour government banned any further development in the Greater London area (Marriott, 1967). The advent of higher inflation also bid up construction costs and ultimately changed the dynamics of investing in commercial property during the 1960s.

As inflation became entrenched, lease lengths and more importantly rent review periods were reduced, in stages, to five years, which became the norm in the United Kingdom for decades to come. So inflation brought the prospect of future increases in rental income from an investment in commercial property at periodic rent reviews. It altered the nature of commercial property from a fixed-income to an equity-type investment (Fraser, 1993). This changed the attitude of the life assurers. They had been merely passively involved in providing long-term finance, but now they wanted a stake in the upside; that is to say, they started to take an equity stake in the entire development project. From that position, it was but a small step to undertaking the entire development project alone and even to broadening their exposure by directly investing in any form of commercial property. It was the beginning of life assurance funds acting as both financiers to and direct investors into commercial property (Fraser, 1993).

In the early 1970s the liberalization of the financial markets (which are referred to in depth in Chapter 2), rapid economic growth and the expectation of membership of the European Economic Community (now the European Union) in 1973 brought about significant increased demand for office space, and not just in London. Obtaining accurate commercial property data for that period is not easy, but average commercial property values are reported to have increased by over 23% in both 1972 and 1973, with office properties delivering by far the greatest growth (MSCI/IPD, 2014a). Fraser (1993) notes that the increases in values during this period far exceeded those of any year within living memory. That may well be so, and certainly, no nominal capital value rise in any calendar year since has ever exceeded those witnessed over 40 years ago. Even stripping out inflation reveals that the real rates of capital growth were pretty exceptional too. Real capital growth, as shown in Figure 1.1, in 1972 and 1973 was 14.8% and 11.4% respectively (MSCI/IPD, 2014a). The 1972 real capital growth figure has since been exceeded just the once at the peak of another boom in 1988.

With economic fundamentals positive during these boom years there was rising tenant demand justifying the invigorated investor interest in the asset class. However, the boom was the first one in the United Kingdom to have been markedly affected by the use of debt to support investment (a topic that is further explored in Chapter 3). From 1967, the flow of funds into property increased substantially until 1973 (which also was the peak year of growth in property capital values and in the country's GDP) but then reversed quickly as a recession impacted. It is intriguing to note that although property companies were net disinvestors from 1974, financial institutions such as life assurance companies were actually still investing (Fraser, 1993). That dichotomy is not as strange as one may initially think. The life assurance funds and pension funds were in the midst of strong fund inflows at the time, so strong in fact that even cutting the overall allocations to the commercial property asset still resulted in funds being invested in property. Equally, these institutional funds, which used less debt (if any) to assist purchasing, were also not under the same selling pressure as the property companies were when the

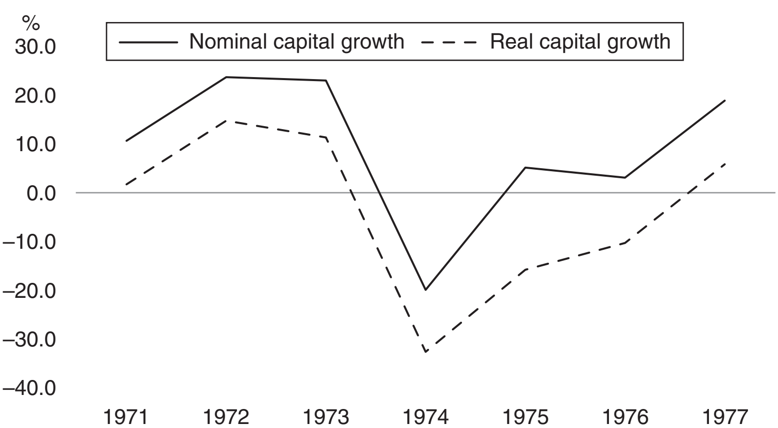

Figure 1.1 Nominal and real capital value growth 1971–1977. *Source:* MSCI/IPD (2014a). Reproduced with permission.

property market turned. We look into the position of the life assurers in more detail in Chapters 2 and 3.

The property bust came as UK inflation reached 20%, the balance of payments continued to deteriorate and there was a series of sterling crises. A new Labour government was forced to obtain a loan from the IMF and hike interest rates. Coupled with a tight fiscal policy, there were sharp falls in the stock market and in commercial and residential property values. Banks' balance sheets were weakened, particularly those whose assets were secured on property. And in a striking resemblance to events more than 30 years later, bank deposits began to be withdrawn in what became known as the 'secondary banking crisis', which is considered in more detail in Chapter 2 (Fraser, 1993).

Property companies were faced with rising debt interest payments as interest rates rose coupled with at best static income as the overheating economy contracted by a cumulative 4% over the two years from 1973. Many highly indebted property companies were forced to sell to address their debts. Much of these companies' debt had been borrowed from what was known as the secondary banking sector, whose future was by then looking precarious. Not only were these property companies unable to obtain new loans, they were faced with the difficult task of either having to refinance maturing loans or having to sell property in order to remain solvent. As more and more property was placed on the market, buoyant 1973 gave way to an altogether different couple of years. A hard landing was the inevitable consequence (Fraser, 1993).

In nominal terms, the fall in commercial property values was recorded only over one calendar year (1974, when average values fell by 18%). But in inflation-adjusted terms, the downturn was much more acute, covering three years (1974–1976) and cutting values by an inflation-adjusted 49% (see Figure 1.1). In all likelihood, the actual duration of the fall would have been longer and its magnitude would certainly have been even more acute had more frequent valuation data been available then, rather than only the annual figures. Nevertheless, the above 49% fall in real capital value was just as severe as seen in the commercial property crash of 2007–2009 (MSCI /IPD, 2014a).

The government continued through the 1970s to struggle with reducing inflation in the economy and its consequences for real incomes. In 1979 a Conservative government was elected led by Margaret Thatcher. The early years of the government were accompanied by high interest rates (in an effort to defeat inflation), higher indirect taxation but lower personal rates of taxation, public spending cuts and recession. Together with the arrival of income from North Sea oil, which prompted sterling being given 'petro-currency' status, the value of the pound rose, damaging the country's exporters and reducing the price of imports. The impact on the labour force was severe, with unemployment reaching 13%, or a total of 3 million – the highest since the great depression of the 1930s.

The unemployment story was critical for the performance of commercial property. Large tracts of the Midlands, the North of England and Scotland were laid waste by the closure of factories as de-industrialization accelerated through global trade. The resultant high rates of unemployment, and the threat of future unemployment for those in work, plus the very high mortgage rates, subdued consumer spending in the early part of the 1980s. It was not a positive backdrop for commercial property to perform against, and it did not. At the same time investors were presented with alternative competing investments through the introduction of index-linked government bonds, and the removal of exchange controls by the government opened up investment opportunities overseas.

It took three years before the 'battle' against inflation could be said to have been 'won', but finally, by August 1982, inflation was down to 5%, allowing interest rates to fall. The fall in inflation was a defining step change for the economy, but the benefits took some years to crystallize. A cut in interest rates finally prompted some good news for the hard-pressed homeowner while manufacturing (or what was left of it) was regaining its competitiveness. Economic growth returned, and from the mid-1980s a consumer spending upturn contributed to commercial and housing property values beginning to rise again in nominal and real terms (Fraser, 1993; Jones and Watkins, 2008). Alongside the surge in house prices there was also a commercial property development boom that centred especially on London offices and was stimulated by a combination of ICT improvements and increased demand resulting from financial deregulation. Fainstein (1994) estimated that new development during a 1980s boom contributed a net addition of nearly 30% to the office stock of the central area of London (including the new docklands office area).

Over the whole decade, average total commercial property returns were 11.6% per annum, or 4.9% per annum when adjusted for inflation – both highly creditable levels of returns. But that decade encompassed three distinct growth phases: the first two years were years of very high inflation and commercial property's return was equally high; the middle five years reflected lower inflation and similarly property returns were low; and two of the last three years provided exceptional total returns of over 26%, significantly ahead of the increasing inflation rate.

The seeds of the end of the property boom began with the 1987 stock market crash. The government's concern about its impact on the economy led to fiscal loosening, but this fuelled the existing consumer spending and house price inflation booms. To address the subsequent inflationary pressures, interest rates were raised to record levels. The economic recession which followed was deep and accompanied by another property downturn. Residential values fell substantially, and with a rise in unemployment, the result was that foreclosures reached record levels. Commercial property capital values fell in nominal and real terms through 1990 to 1992, as shown in Figure 1.2. As the recession took hold, tenant demand withered and the property market was further adversely affected by the development boom pipeline that continued after demand had disappeared.

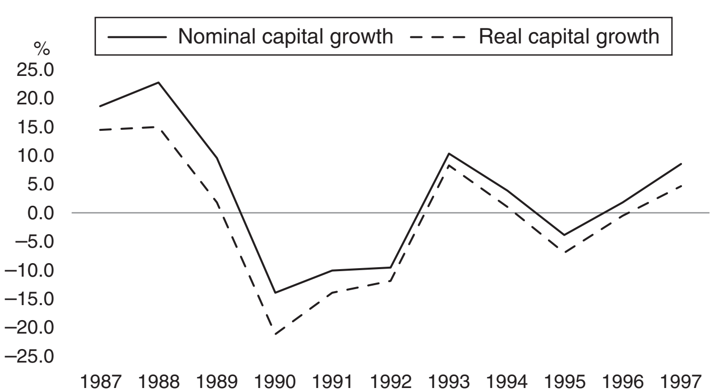

Figure 1.2 Nominal and real capital value growth 1987–1997. *Source:* MSCI/IPD (2014a). Reproduced with permission.

The recession was exacerbated by the exceptionally high interest rates in double figures as part of the government's strategy to control inflation. High interest rates were designed to increase the value of sterling. The plan was for the value of sterling to shadow the German Deutschmark, the currency of a low-inflation economy. Following a wave of speculative sales of sterling, suddenly, in October 1992, on what became known as Black Wednesday, the United Kingdom abandoned its Deutschmark policy, which immediately allowed UK interest rates to fall and base rates tumbled to 6%. The cut in the interest rates prompted economic recovery and a rise in property values (see Figure 1.2). But the recovery proved temporary. It was to be another two years before property generated meaningful long-term rental growth and capital growth. Like the economy itself, commercial property then generated high rates of growth consistently until the onset of the GFC.

Overall since the 1970s, the United Kingdom has experienced four major property booms and crashes prior to that caused by the GFC. All four of the booms were associated with periods of strong economic growth, all were characterized by the increasing use of debt by property investors and each was followed by a severe property recession. The property downturns occurred over 1974/76, 1979/85, 1990/92 and 1995/96. There is an argument that the two years 2001/02 should also be included, but the total fall in average capital values was modest, less than 1% in real terms. This modern era of cycles since the Second World War is only the latest chapter of the history of development/property cycles in the United Kingdom that can be traced back to before the Industrial Revolution (Lewis, 1965).

A Worldwide Phenomenon

Property cycles have similarly occurred around the world through history, although they are less well documented. In the late 1960s through to the early 1970s there were development booms, for example, in New York, Sydney and Dublin (Daly, 1982; MacLaran, MacLaran and Malone, 1987; Schwartz, 1979). The data on the United States is best verifiable, for example Jones (2013) charts office property cycles of New York back to the 1920s. Wheaton (1987) reports on the US office market between 1960 and 1986, and based on vacancy rates identifies three distinctive cycles with market peaks in 1961, 1969 and 1980. In addition Dokko *et al.* (1999) study 20 metropolitan areas in the United States and find that cities had different cycles.

The growth of financial services and the emergence of global capital markets since 1980 have stimulated a strong pressure toward creating 'interlocking' markets, especially of major cities. The underlying trends have been the liberalization of capital movements that has resulted in the global co-movement of share prices and real estate investment strategies (Lizieri, 2009). There are indications that this has contributed toward property cycles occurring simultaneously around the world, although the evidence at least until recently is incomplete. Goetzmann and Wachter (1996) argue that there is clear-cut evidence of office markets moving up and down with global business cycles based on an analysis of rents and capital values in 24 countries.

More contemporary research by Barras (2009) detects three global office cycles since the 1980s, starting with the late 1980s, followed by a more subdued upturn in the late

1990s and the speculative-driven boom of the mid-noughties. He plots in some detail the similarities and differences of the office cycles of 25 'global cities' – 9 in the United States, 9 in Europe and 7 in Asia-Pacific – based on rent and vacancy levels. This globalization of property cycles is undoubtedly a manifestation of the three-way interdependence between the property sector, financial services and macroeconomies (Pugh and Dehesh, 2001).

The degree of volatility in property cycles between countries can be explained by a number of factors, including differences in the supply response to rising demand that in turn is a function of planning controls. Another factor may be the differential approaches to the valuation of property. This can be seen in the use of 'sustainable' valuations adopted in some European markets which are designed to smooth changes in individual asset valuations. That means that valuations in countries adopting that approach rarely show much volatility even in times of deep market stress.

Commercial Property's Role in the Wider Economy

Commercial property stock is essential to a nation's economy and the production of goods and services. A macroeconomic perspective on property also views it as a component of the fixed capital stock of a nation. Property development, whether it is residential, commercial or industrial construction, is then considered to be expanding the capital stock of a country. It is essential to the working of the economy. The proportion of capital investment accounted for by real estate development will vary from country to country and from year to year as a result of property cycles. However, a country's changing capital stock is not just the result of additions but is also a function of the depreciation of the existing stock so that it is important to assess additions in terms of the net impact. Part of the space created in the upturn of a property cycle may be replacing obsolete buildings, that, for example, no longer meet current needs in terms of size or structure, say, because of ICT innovations. From this macroeconomic standpoint, we can view the cyclical supply of buildings as central to the business cycle, not simply as a distinct property cycle.

Besides cyclical influences, there are also long-term effects on property investment. One long-term force, as noted above, is technological change, for example flexible working enabled by ICT may reduce total office space requirements. It is also seen in the rapid reduction in the number of banks as cash machines replace tellers and online sales vie with high street shops. Other long-term influences include the decentralization of economic activity within cities and the rise of out-of-town retail centres and business parks (Jones, 2009). Where population is rising there is a need for additional housing while increasing real incomes can lead to the demand for more shops. The shift to a services based economy in many developed countries over the last 50 years has been reflected in a growth of offices and a decline in factories.

There are therefore overlapping short- and long-term economic influences on the property market. The performance of the property market is interwoven with the economy and business cycles, and this means that there will forever be property cycles. However, property cycles have their own internal dynamics, and the booms and busts are more amplified than the business cycle. The longer the economic upturn the greater the property boom.

Property Investment and Short-termism

In addition to the various economic, social and property market changes over the years, there has also been a marked change in the attitudes of investors (see Chapter 2). It is not that long ago that investors were content to buy an investment 'for the long term' – a period of time which was never defined but which could be generalized as certainly being more than five or even ten years. It was not uncommon for institutions (and particularly life funds) to hold property assets almost indefinitely that is, their individual asset business plans did not include sales.

It can be argued that what was partly responsible for changing investors' approach was the advent of fund performance measurement. At first property suffered from the lack of market statistics when compared with bonds and shares, but from the early 1980s this was addressed with the evolution of new databases discussed below. Not only did this lead to the monitoring and comparison of the overall performances of investment funds' portfolios with those of their peers but also the performances of each asset (Hager, 1980). This measurement was ultimately being conducted over shorter and shorter periods.

This process has been bolstered by the emergence of external fund management. Prior to this development property was generally managed internally by financial institutions. Now many fund managers are under competitive pressures to deliver target returns for their clients, and to do so over short periods. When the management contract period is nearing completion they know they may face competition from other fund managers for the renewal of the business. There are also a vast number of new property investment management companies and funds that depend for their existence on attracting (new) investment funds (Forster, 2013). The result is that in the middle of the 2000s properties churned over much more rapidly in the United Kingdom, and the average holding period fell to around five years (Gerald Eve, 2005).

Part of the reason for this was the rapidly rising capital values in the mid-noughties that meant that substantial profits could be made by trading properties with little effort on the part of the owner. This was rendered even more profitable if borrowings were used. However, there were also property market forces at work that challenged the traditional long-term passive investment model. Cities were experiencing a long-term upheaval in the spatial structure of the property market that brought new property forms such as retail warehouses, and many buildings needed to be refurbished or indeed redeveloped to meet modern requirements (Jones, 2013). This was also reflected in shorter lease terms as tenants sought flexibility to respond to the pace of change (Office of the Deputy Prime Minister, 2004).

The commercial property market conditions of the noughties were probably at their most vibrant compared to its past. The combination of short-termism and dynamic change provided greater scope for profit but also greater scope to make bad commercial property decisions.

Measuring Commercial Property Market Performance

Information on the commercial property market has traditionally been weak. Part of the reason is that the heterogeneous nature of properties makes it difficult to compare the price of individual properties. The scale of turnover in the market in any given locality is not sufficiently significant either, unlike the housing market, to use the evidence from transactions as a basis for the derivation of statistical trends. Instead commercial property databases have been developed primarily based on the regular valuations of properties usually undertaken for large owners, the financial institutions. These valuations are then embedded into an aggregate property database. This model is applied in many countries, although the introduction of these databases has been phased in from the early 1980s. In the United States the main database of this kind is constructed by the National Council of Real Estate Investment Fiduciaries (NCREIF) while elsewhere in the world MSCI (IPD) is the primary publisher. These databases are available on a paid subscription basis.

The valuations in these databases are derived from valuers or surveyors who use, in the main, a comparative approach to estimate property values. In other words they compare the capital or rental values of similar properties (in terms of type/location) sold or let. However, capital values *per se* are not used to compare the value of properties, instead yields or capitalization rates (in the United States) are applied. The reason is that the use of capital values on their own cannot determine which of two properties that are very different is the more expensive. Yields resolve this by standardizing for the different rental incomes of the properties. The (initial) yield is calculated as

$$\frac{\text{net rental income}}{\text{capital value}} \times 100$$

By comparing yields it is possible to assess which of the two are more expensive given their current rental income. The higher the yield the lower is the value, and vice versa. More importantly, it is changes in yields, how much investors are prepared to pay for a given rental income (including future expected growth), that determines the capital value of a property. For these reasons property market price trends are usually quantified not by using capital values but by yields. This approach is followed in this book.

In the book the analysis of commercial property trends in the United Kingdom is primarily based on annual or quarterly data from the MSCI/IPD Digests (2014a, 2014b). Overall commercial property yield and rental market trends are taken as the "All Property" indices/values from this source. In some cases the analysis is disaggregated to the retail, offices and industrial sectors as well as by region or property type (e.g. shopping centre). There are a few points where necessary where the research employs monthly data but this is based on a smaller sample size (MSCI/IPD, 2015). The research also draws on equivalent data for other countries produced by the same company from its Multinational Digest December 2014 (MSCI/IPD, 2014c). Commercial property returns in the United States are derived from NCREIF data. The book also utilizes information from a relatively new source on transactions collected by a private company, Property Data. Since 2000 the company has recorded over 34 000 UK investment transactions.

In addition to yields, the book also examines how the risk premium for commercial property varies over time. The risk premium is the additional return an investor expects from holding a risky asset rather than a riskless one – in essence the difference between the total expected return on an investment and the appropriate estimated risk-free return. For property it will encompass an allowance for the risk associated with property as an asset class – for example, uncertainty regarding the expected cash flow (both income and capital), illiquidity, management and transaction costs (Baum, 2015; Fraser, 1993). Investments with higher risk will normally attract a higher risk premium. Baum (2015) estimates the expected long-term risk premium for the property market at 3%, the mean of an historic range covering the period 1921–2011, although there has been considerable variation over the period (Jones, Dunse and Cutsforth, 2014).

To calculate a risk premium it is necessary to start with a risk-free rate. In UK commercial property investment calculations the risk-free rate is usually taken as the redemption yield on a 10-year government issued bond (gilt). Although these are not riskless they provide a better comparison than do treasury bills (government bonds or debt securities with maturity of less than a year) because

- they are a closer substitute for property for the long-term investor;
- there is a closer relationship between their yields and property yields over time;
- the market in long-dated gilts is larger and less speculative and their redemption yields are believed to provide a better indication of the opportunity costs of long-term investment capital.

Book Structure

The subject of the book is the commercial property boom of the noughties and its implication for banking. In the succeeding chapters, we look at the commercial property market in the build-up of the boom and then during the post-crash period. Figure 1.3 gives a sense of the historic scale of the boom and bust of the commercial property market in the United Kingdom over that decade, not only in terms of its dramatic rise in real capital values but also in the subsequent fall. To fully understand the phenomenon the book takes a step back by first examining the evolving investment landscape and the changing lending practices of the banking sector over previous decades.

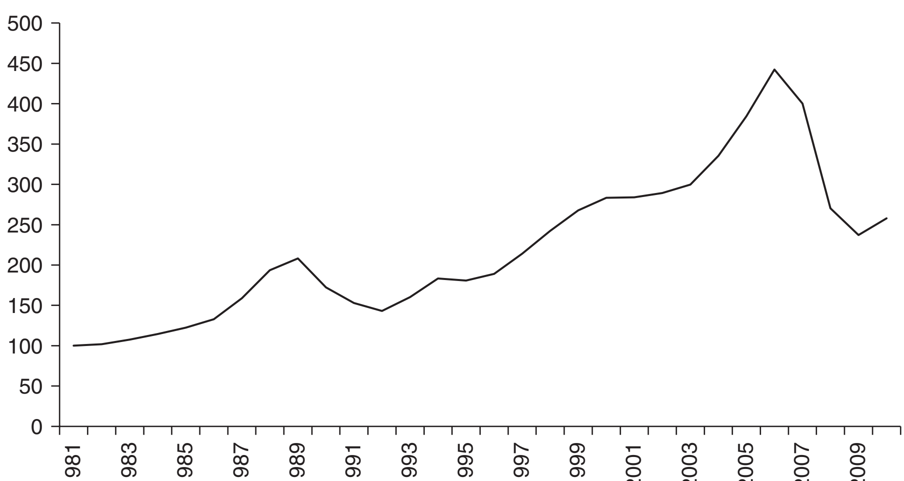

Figure 1.3 Real commercial property capital values 1981–2010 (1981 = 100). Figures deflated by the retail price index. *Source:* MSCI/IPD (2014a). Reproduced with permission.

Chapter 2 Long-term Changes to Property Finance and Investment

This chapter provides the historical context to the book by explaining recent trends in the landscape of banking finance and commercial property investment. With the role of banking finance critical to the property market through its support of investment purchases and the funding of development activity, the starting point for this chapter is bank lending. It outlines the evolution of the banking sector in the United Kingdom, emphasizing the role of deregulation and globalization in transforming a once restrained industry to one encompassing high-risk 'casino' businesses. The chapter uses this outline to provide a stage to explain banks' entrepreneurial motives during the property boom of the noughties.

The financing of, development of and investment in commercial property is explained within the short-term framework of property cycles and the long-term evolving economics of life assurance funds and pension funds since the 1960s. The arrival of overseas investors and their motivations are also reviewed. The backdrop is the continuing transformation of cities that has brought redevelopment and decentralization together with new property forms such as retail and office parks. The overall property investment outcome of these combined influences is shown to be the emergence of niche property funds, the growth of indirect investment via first limited partnership funds, new property investment vehicles, the emergence of 'retail' investors and short-termism.

Chapter 3 Economic Growth, Debt and Property Investment through the Boom

In this chapter we develop building blocks to explain the key underlying forces that influenced the property boom. In particular it profiles the predominant financial attitudes of the time supported by the positive macroeconomic climate that held sway in the build-up of the boom. These attitudes were common to most Western economies as the world experienced an unprecedented long economic upswing. The chapter stresses that this macroeconomic environment provided the basis for the boom and coloured views about the inherent risk of property investment, lending and borrowing. It further draws out the role of finance and debt, tracking the changing cost, scale and availability of bank-lending finance including lending criteria in the United Kingdom through the decade.

The chapter then considers the implications for investors, showing how gearing enabled very high profits to be made in the boom thereby expanding the funds wishing to purchase property. It looks at the extent to which the availability of finance and the attractive investment conditions translated into development activity. Finally, Chapter 3 examines the implications of the vast weight of investment money attracted into the property market in terms of the spread of values.

Chapter 4 The Anatomy of the Property Investment Boom

This chapter examines the scale and timing of general global property upturns, both housing and commercial, around the world beginning in the mid-1990s and gathering pace in the first part of the last decade, setting the UK experience in a wider context.

The chapter then examines the anatomy of the investment boom in the United Kingdom by reference to the relationship between capital and rental values as the boom develops. It asks what proportion of the rise in capital values can be attributed to rental growth and examines the premise that this time the boom years really were different from what had happened in previous cycles.

Chapter 4 considers the scale of investment funds and the growth of transactions during the boom. It also reviews who was purchasing (and selling) and the impact this had on capital values. A particular focus is the large inflow of cash via retail funds (funds that are derived from selling units to individual investors) as property returns rise in the fervour of the boom. The role of bank lending in supporting the weight of money into commercial property is reprised from the previous chapter.

Ultimately the chapter assesses the rationality underpinning the investment boom. It reviews the fundamentals of pricing and how investment behaviour in the boom arguably distorted a proper assessment of price, value and worth, thereby encouraging a disconnect between rental value growth and capital value growth. In this way it considers to what extent the boom represented a bubble.

Chapter 5 The Global Financial Crisis and its Impact on Commercial Property

In this chapter the timing of the financial events that collectively gave rise to the GFC are set out as the preface to an analysis of its worldwide impact on the commercial property market. It includes the unravelling of banking liquidity and its impact on lending and ultimately on commercial real estate investment markets globally. The chapter focuses on the detailed consequences for the UK property market in terms of falling capital values/rising yields, forced sales, falling liquidity and transactions and the collapse of bank lending. The study is placed in the context of the dysfunctional market and the irrational behaviour discussed in Chapter 4 and the mismatch between capital value growth and rental value growth. Finally it examines the market responses in the context of changing perceptions with regard to property risk premium.

Chapter 6 Property Lending and the Collapse of Banks

This chapter tells the story of the growth of commercial property lending by banks through the boom and the consequences for the banks of the subsequent fall in capital values. It distinguishes between the short-term liquidity problems caused by the collapse in credibility of mortgage-backed securities during the GFC and the impact of the falling commercial (not residential) property valuations on their loan books. The chapter demonstrates how this decline in values undermined the capital bases of many banks and ultimately challenged their fundamental economics much more than a short-term liquidity problem.

The chapter describes the paths to disaster of a number of major banks through commercial property lending in the United Kingdom, Ireland and the United States. In the process it examines attitudes to risk, the failure of predictive models and the impact of banking behaviour on property market trends. It encompasses in-depth case studies of RBS, HBOS, the Dunfermline Building Society and the Co-operative Bank, and Irish banks.

Chapter 7 Aftermath and Recovery

The property market recovery from the GFC around the world suffered not only from the legacy of debt owed to the banks but also from the vast overhang of consumer credit. Many banks faced massive challenges to their fundamental viability, only part of which was the resolution of the bad debts in their commercial property loan book. Chapter 7 chronicles the steps selected banks took to address these debts. The backdrop to the banking system's attempts to deal with its overhang of commercial property debt is the macroeconomic environment. The chapter therefore begins by examining the international macroeconomic policy reactions to the GFC, including the recapitalizations/nationalizations of banks, the timing of the recessions in the different countries, and the initial international fiscal stimuli followed by austerity policies.

The trends in housing and commercial property markets in various countries, and the differential impacts of the GFC in the short and medium terms, are also mapped out for different countries as a prelude to examining the processes of recovery. But the ramifications of the GFC stretched further than the problems of the banks so the chapter also reviews the impact of the GFC on property investors such as financial institutions, property companies and the specialist property funds explained in Chapter 3. Finally the chapter examines the overall impact of the boom and bust for attitudes toward commercial property as an investment class and in particular how investors view the risks involved.

Chapter 8 Conclusions

Individual chapters consider different aspects of the lead up to the GFC and the commercial property boom and bust followed by the consequences for banks, investors and the property market. To address the complexities individual chapters have dealt with particular issues, although in reality many of them are interrelated. The conclusion examines the important cross-cutting themes that sum to the boom, bust and recovery.

These themes include the role of globalization in terms of the international commonality of macroeconomic cycles and world capital markets that entwined banks in a labyrinth of debt instruments. It also considers the impact of greater international competition for commercial property lending between banks. A second theme relates to the implications of the use of valuations rather than actual prices to principally describe the property boom and bust. The responsibility of the banking sector through the boom, bust and recovery is then assessed, following which, the property sector's irrational exuberance is evaluated, first through over-optimism in the boom and then to the reverse, over-pessimism, in the bust. The final sections look to the future in terms of whether it could happen again and what can be done – for example, how debt should be managed in the future.