

Deleveraging Commercial Real Estate in Europe

Research

Peter Hayes, PhD
 Director of Research, Europe
 UK Office
 Tel +44 (0) 207 766 2435
 peter.hayes@pramericarei.com

Greg Kane
 Research Analyst, Europe
 UK Office
 Tel +44 (0) 207 766 2436
 greg.kane@pramericarei.com

Executive Summary

- Banks worldwide – subject to government bailouts for survival – are in a capital preservation mode, leading to a general retreat from commercial real estate lending.
- This conservative behavior is a sharp reversal from the excesses of 2003 to 2007, when debt financing of real estate grew by 58% in the private market and 150% in the public market. The lack of debt capital has led to a drop in investment sales activity.
- As a result of falling values, property owners in Europe may need an estimated €105 billion of additional equity by the end of the year to prevent loan-to-value (LTV) covenants from being breached. Depending on how far values fall and how banks react, the cumulative shortfall could top €200 billion by 2011.
- Of more immediate concern are the debt markets, which are likely to shrink. Based on the expected volume of debt maturities and origination in Europe, a debt shortfall of €79 billion could emerge in 2009, reaching €109 billion by 2011.
- The subsequent distress will give rise to investment opportunities, particularly in terms of financing real estate transactions. This is likely to be most pronounced in the real estate markets of the UK, Spain and France.

Introduction

Eighteen months into the global economic downturn, the banking sector remains beleaguered and battered. Many large banks are dependent on government handouts, while others are in the midst of major restructurings. Reuters estimates that European and U.S. banks have reported more than \$740 billion of write-downs since the credit crisis began in mid-2007. Bank write-downs could eventually rise to \$3 trillion over the next two years, according to the International Monetary Fund. Some 40% of the bank sector in Europe by market capitalization (including 15 of the 50 largest institutions) has accepted taxpayer money. The number is even higher in the U.S., where 76% of the bank sector by market capitalization (23 of the 50 largest institutions) has accepted public funding. The depth of the crisis means it will likely take several years for banks to repair balance sheets and rebuild capital bases, which is a prerequisite before they get back to so-called “normal” lending again.

With banks lending conservatively, the demand for debt in upcoming years looks to be higher than the supply, creating a large shortfall that property owners must make up. This report focuses on how the combination of lower property values and less debt will impact the European commercial real estate market.

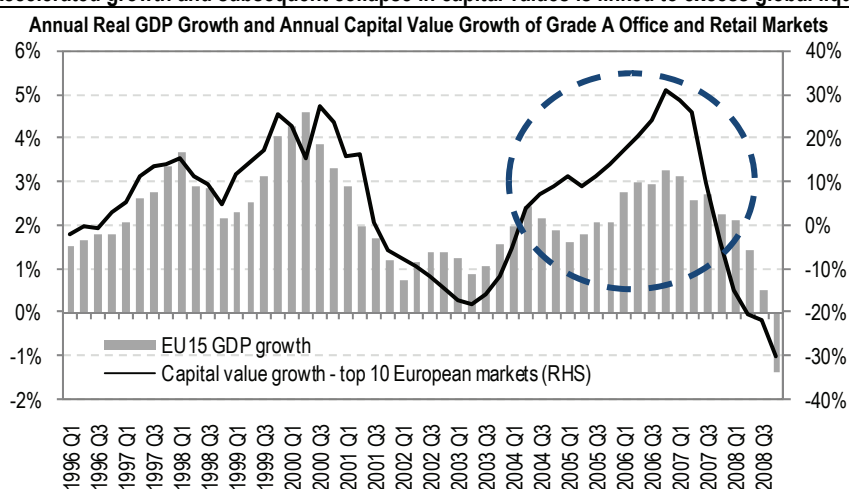
Prudential Real Estate Investors
 8 Campus Drive
 Parsippany, NJ 07054
 USA

Tel 973.683.1745
 Fax 973.734.1319
 Web www.prei.com

The European Commercial Property Sector

As a capital-intensive industry, commercial real estate is particularly vulnerable to swings in credit markets. There are strong financial and economic linkages between commercial property cycles and credit cycles, not least the role of commercial property as collateral and the significant impact that rising values have on banks' lending behavior and performance. The connection between the availability of debt and asset values helps explain the performance of the European commercial real estate sector in recent years. During the years of cheap and easy debt, associated with several years of excess global liquidity and the search for yield, European commercial real estate values grew more rapidly than could be accounted for by fundamentals.¹ Capital value growth far outstripped real GDP growth in every European country. It is of little surprise, then, that as credit markets have collapsed, so have real estate values.

Exhibit 1: Accelerated growth and subsequent collapse in capital values is linked to excess global liquidity



Prudential Real Estate Investors, Eurostat, Cushman & Wakefield

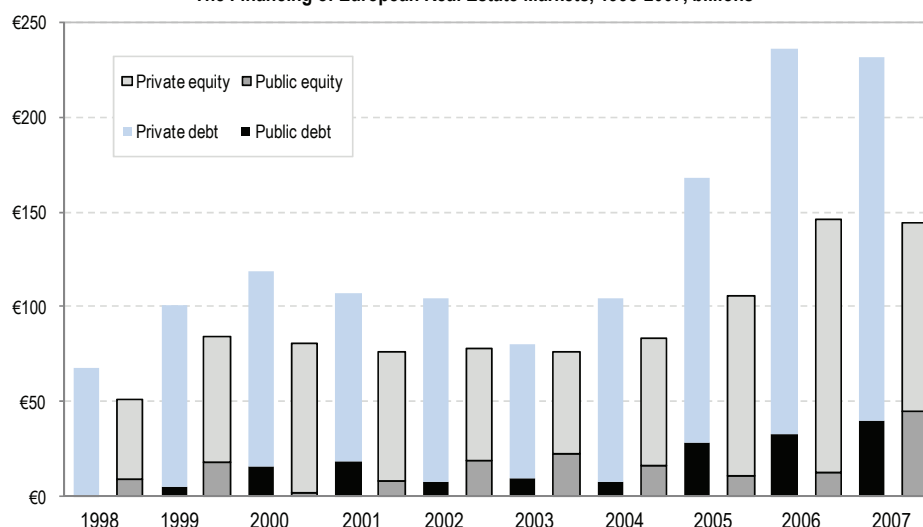
The growth in debt-based financing of European real estate transactions between 2003 and 2007, when debt was cheap, is telling. During that time, private debt financing grew 58%, climbing to a total €1.7 trillion. At the same time, the commercial mortgage-backed securities (CMBS) market grew by 150%, to €183 billion. In most countries, LTV ratios rose above historical averages as banks aggressively competed for new business. The average maximum LTV ratio of loans originated in Europe in 2007 was about 80%. At year-end 2007, commercial real estate debt represented 176% of the capital base of European banks, making up 12% of their entire loan book. This was up from 8% in 2005² and is double the 6% long-term average.³ Over the same period – 2003 to 2007 – private equity finance grew by 43% (to just over €1.27 trillion) and public equity finance by 47% (to just over €260 billion).⁴

¹ 2004-2007, IMF World Economic Outlook, October 2008

² European Central Bank. According to Goldman Sachs, the growth in the UK has been more staggering: from 7% of total loan book in 2000 to 17% in 2007.

³ In-house estimates based on calculations from JP Morgan and Merrill Lynch.

⁴ DTZ Money Into Property

Exhibit 2: Recent growth of private and public debt financing of European property was unprecedented**The Financing of European Real Estate Markets, 1998-2007, billions**

Prudential Real Estate Investors, Eurostat

The financial crisis has sparked a wholesale retreat by lending institutions from the commercial real estate debt sector. In turn, this has prompted a reversal of the cycle that created the 2003-2007 bull market. Property transaction volume in 2008 fell 55% year-over-year, while capitalization rates rose sharply. The decline in property values has triggered a negative feedback loop. Not only has it eroded banks' capital bases, leading to a further retreat in lending, but it has caused many loans to breach – or come close to breaching – their loan-to-value covenants.⁵

Exhibit 3: LTV ratios grow in recent years across Europe

	Estimated LTV Ratios of New Loans on Real Estate Transactions in Select Countries, 1997-2007					% of All European Transactions
	1997-2003	2004	2005	2006	2007	2004-07
UK	63.3%	61.6%	63.2%	68.1%	88.0%	28.3%
France	57.3%	53.8%	63.2%	61.9%	60.2%	14.8%
Germany	57.3%	68.2%	66.7%	78.5%	68.0%	12.1%
Spain	59.1%	59.6%	63.7%	52.5%	76.5%	5.3%
Netherlands	55.1%	61.7%	58.5%	63.0%	68.5%	3.4%
Other Eurozone	58.6%	52.3%	56.4%	51.0%	54.5%	10.1%
Nordics	54.0%	77.7%	64.1%	56.9%	54.8%	7.8%
Central Eastern Europe	56.5%	51.9%	58.5%	58.2%	59.0%	8.4%

Prudential Real Estate Investors, DTZ

⁵ The loan-to-value (LTV) ratio relates to the amount of debt held against a real estate asset, often expressed as a percentage of the asset value. Real estate loans often have covenants that prescribe a maximum LTV. If those covenants are breached, lenders have the legal right to demand full repayment of the loan. That often prompts renegotiation of the loan, which typically results in the injection of additional equity.

The Loan-to-Value Covenant Issue

To date, there has been little attention paid to LTV breaches in European real estate, in part because property values have yet to fall enough to trigger a significant number of breaches. What's more, on loans where debt-service is being paid on time, banks are reluctant to press borrowers to repair LTV breaches for fear that it will prompt an increase in foreclosures.

Banks learned from past experience that foreclosing loans at the trough of a credit cycle puts downward pressure on property values, increasing market distress. Therefore, at the moment, banks appear willing to sit tight and wait for values to recover. The problem is that this might change. It is unclear how long banks can wait and how long it will be before they demand additional equity from borrowers. Potential triggers include deterioration in the outlook for fundamentals, a change in political climate and the need to enforce regulatory requirements such as Basel II.

If banks do enforce covenants, the sums involved could be large. If, as expected, values of Grade-A properties in Europe fall by 16% in 2009, after falling by about 20% since mid-2007, then the typical loan written with an 80% LTV covenant will be in breach. By our estimates, that will create roughly €105 billion of cumulative shortfalls in individual loans. If property values continue to fall in line with market forecasts, then the cumulative shortfall will be more than €200 billion by the end of 2011. If banks use breaches to renegotiate loans and impose a lower LTV ratio, the shortfall could be even larger. If loan covenants had an average 70% LTV ratio, the equity shortfall could total almost €500 billion by the end of 2009 – or nearly half the total value of equity held against commercial real estate.

Exhibit 4: The UK, France and Spain likely face the strongest calls for extra equity to be injected

<u>Estimated Shortfall to Restore Loan-to-Value Covenants, € billions, 2009-2011</u>						
	Europe	UK	Germany	France	Italy	Spain
End 2009						
Capital values 2008-09	-16%	-18%	-15%	-16%	-18%	-20%
Estimated LTV ratio		92%	73%	79%	56%	93%
Estimated shortfall to restore 80% LTV	105	91	0	0	0	14
End 2010						
Capital values 2009-10	-8%	-9%	-6%	-9%	-11%	-15%
Estimated LTV ratio		100%	78%	87%	63%	110%
Estimated shortfall to restore 80% LTV	197	146	0	25	0	26
End 2011						
Capital values 2010-11	-1%	0%	1%	-2%	-2%	-4%
Estimated LTV ratio		100%	77%	88%	65%	114%
Estimated shortfall to restore 80% LTV	203	144	0	30	0	29

Prudential Real Estate Investors, DTZ, PMA

To be sure, the LTV story has yet to play out, and banks remain reluctant to foreclose on loans, so the issue may yet turn out to be relatively benign. The next cause of distress in the real estate market may turn

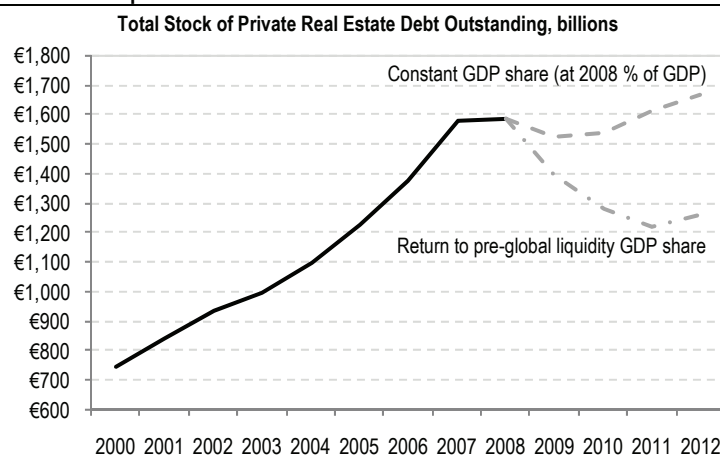
out to be how banks manage down their loan portfolios in the face of a wave of loans coming to maturity. We turn to this next.

Deleveraging European Real Estate

Weaker economic growth and a sharp drop in property values have already led to a significant deleveraging of the European commercial real estate sector. The relatively few banks that are still writing loans today are imposing tougher terms and conditions than in recent years. Today, commercial real estate loans are generally capped at €50 million, with a maximum term of five years, LTV ratio of 65% and margins of 220 bps or more. The collapse in the CMBS market has removed a potential source of debt.

Conditions could get worse. To begin with, the economic outlook for Europe is the worst it has been since the 1980s. According to the Economist Intelligence Unit (EIU), nominal GDP across Europe is expected to shrink by 5.7% in 2009, before returning to a long-term trend of 4.3% by 2012. If banks maintained their current level of real estate lending as a share of GDP, the sharp drop in economic prospects translates into a drop in the cumulative amount of debt from the current €1.7 trillion.⁶ The weak economic outlook alone would be enough to reduce the total stock of debt by 4.1%, or €64 billion, by year-end 2009.⁷ The problem is intensified by the fact that many banks are trying to reduce real estate lending as a *share of GDP* to pre-2003 levels. If they succeed, the total amount of outstanding European real estate debt would fall by €200 billion by year-end and would be 20% below 2007 levels by 2012.

Exhibit 5: European Real Estate Debt Market



Prudential Real Estate Investors, De Montfort, DTZ, EIU

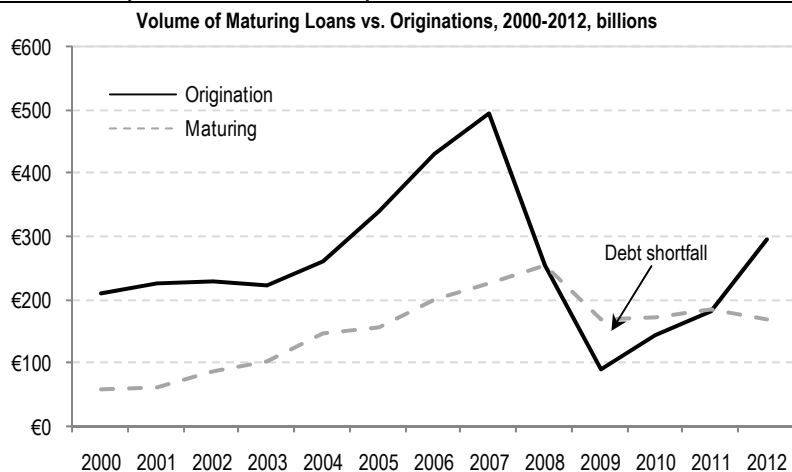
It remains uncertain exactly how much banks will reduce their exposure to commercial real estate debt, but lending volume is almost certain to go down. That will create a significant gap between the amount of debt maturing and the amount available for refinancing. How much? As illustrated in Exhibit 5, we estimate that the European real estate market is set to face a debt shortfall of about €79 billion by year-end, rising to €109 billion by the end of 2011.⁸

⁶ Based on data from the DeMontfort Survey, market interest rates and projected loan duration.

⁷ Total debt stock at end 2008 was 16% in UK, 13% in Europe. The debt stock does not move exactly in line with nominal GDP due to the calculations splitting out UK and Europe ex UK.

⁸ Outside the UK, there is little data available at the European country level to provide robust estimates of likely debt shortfall. The UK is examined in more detail in the appendix but it is possible to borrow some of the relationships identified there and apply them across Europe.

Exhibit 6: European Real Estate Debt Capital Market



Prudential Real Estate Investors, De Montfort, DTZ, JP Morgan

This debt shortfall will have a significant impact on commercial real estate. There is simply not enough debt available to maintain pre-financial crisis transaction volumes and property values. Given projections of economic growth and banks appetite for real estate debt, this shortfall will likely persist until at least 2011. Exhibit 7 summarizes the final result, based on banks actively reducing their loan exposure to real estate:

Exhibit 7: Estimating Debt and Financing Gaps in European Real Estate, 2009-2012, €billions

	2008	2009	2010	2011	2012	Annual Average % Change
Total Real Estate Debt Outstanding	1588	1399	1284	1220	1261	-5.6%
Originations†	257	91	144	182	295	
Volume of Maturing Debt	254	170	171	184	169	
Debt Shortfall (cumulative)*	0	79	107	109	0	

†Originations based on change in total real estate debt outstanding, adjusted for amortization of existing loans

*Calculated as the difference between originations and maturing debt, aggregated over time

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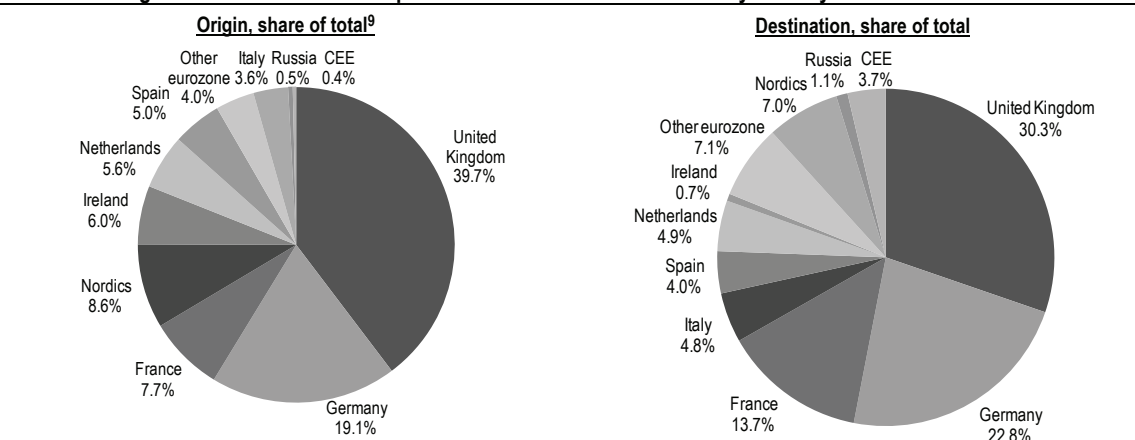
An important point to note is that the impact of any debt shortfall will vary from country to country. One reason for this is that banks have differed in their lending terms and conditions. Exhibit 4, for instance, suggests that lending terms were more relaxed in financing deals in the UK, Spain and France than elsewhere across Europe. However, there is also another reason why deleveraging will vary from country to country and that relates to a possible “home bias” in lending behavior.

Home bias describes a retreat by lenders to domestic markets. In some places, such as in Germany or the Nordics, a retreat will not make a significant difference because debt originations by domestic banks are almost equivalent to the demand for debt. In countries such as the UK and Ireland, which are home to banks that actively lend outside domestic markets, home bias might actually help reduce the size of the overall estimated debt shortfall because lending that would otherwise go overseas may be re-directed to

the domestic market. However, in markets such as Central and Eastern Europe (CEE), where lending is dominated by foreign banks, home bias could have a significant negative impact on transaction volume and values because there are few domestic sources of debt.

In summary, factors likely to determine the level of distress across Europe's real estate markets include not only LTV ratios and property values, but also the volume of debt available in relation to the size of markets. Using those metrics, the UK is likely to experience the greatest distress over the next few years. Sharply falling values will have a much greater impact on bank balance sheets, in turn creating a sizeable impact on cross-border transaction activity, which is important to the market's health. Other countries that look likely to face a higher relative degree of distress include Spain and France. On the other hand, Germany looks less exposed. Banks' use of covered bonds to finance commercial property lending has helped keep LTV ratios down, in turn helping to prevent German real estate markets from getting as overheated as others across the continent. Plus, it will help German banks avoid write-downs and defaults.

Exhibit 8: Origin and Destination of European Commercial Real Estate Debt by Country to End 2007



Prudential Real Estate Investors, DTZ

The debt shortfall will probably be temporary, since we estimate that the supply of debt will meet projected demand by 2012. Yet even once the debt market recovers, unless it receives a massive injection of fresh equity, banks will still be looking to manage down the LTV ratios on their existing loan books. This means that even after the dust settles, new borrowers are set to face conservative lending terms and origination volume will to return to pre-2003 levels.

Investment Opportunities

The reluctance of banks to lend and the growing distress in the debt markets gives rise to investment opportunities through vehicles that invest in distressed-debt or mezzanine finance. One opportunity comes from banks that are looking to offload exposure to real estate by selling non-performing and distressed debt. Another opportunity comes from directly providing debt, be it senior or mezzanine, either to property owners facing financing shortfalls, or to buyers looking to take advantage of an expected pick-up in distressed sales. Many borrowers will find there is a gap between the size of loans written on properties in recent years and the amount banks will lend today. Property owners will either have to come up with

⁹ These are approximations based on the investment transaction activity by country, annual average, 2005-2007.

additional capital or find an investor willing to provide it. Vehicles with similar strategies have provided capital to meet debt shortfalls in previous real estate cycles.¹⁰

Although opportunistic debt activity has been limited so far in this cycle, it is likely to become a regular feature of the European real estate market in coming years. For one thing, opportunities in the property sector are limited because property owners have little incentive to sell when prices are low, unless there is distress involved. Debt investing at the moment offers greater liquidity and lower risk than buying property, especially since acquisition finance is hard to find.

Looking beyond the debt market distress expected over the next couple of years, in the absence of a significant injection of equity, banks are likely to continue to manage down loan portfolios. This implies senior debt will be scarcer than in recent times even once debt markets have recovered. As a result, investment strategies that target capital at the gap between borrower equity and senior bank debt should remain attractive over the longer term.

Concluding Comments

The European commercial real estate market is facing one of its most difficult periods for some time. As a capital intensive industry, it is particularly vulnerable to swings in credit cycles. The severity of the current global financial crisis is most visible when looked at in terms of the collapse in real estate investment activity and falling real estate values. Part of the pain is being caused by the weaker outlook for space markets. But it also involves broken banks and a lack of debt to finance transactions, payback for several years of excess global liquidity that fed on easy and cheap debt.

Added together, the drop in Grade-A property values – forecast to hit about 40% peak-to-trough across Europe – are less about fundamentals and more about credit markets. Markets will eventually recover, but the shape of the recovery will ultimately depend on the banks. In the meantime, distress will create a growing number of investment opportunities, particularly in the UK in 2009 and 2010. Investors who participate during that time likely will find a landscape with far fewer players than in recent years.

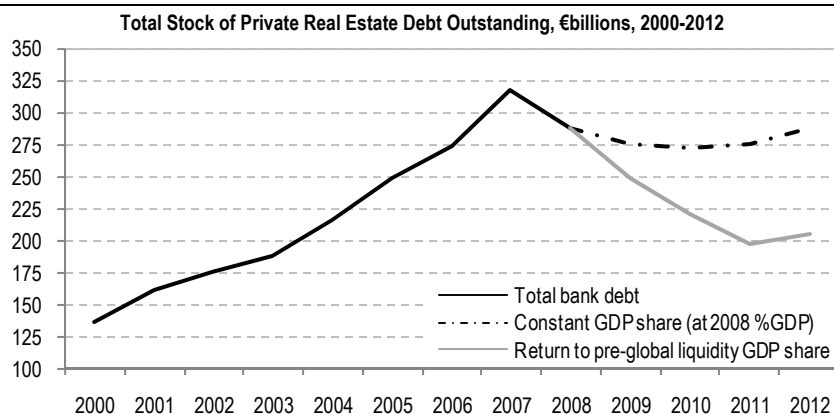
¹⁰ See, for example, Fraser, W.D. *Principles of Property Investment and Pricing* 2nd edition Palgrave Macmillan (1993).

Appendix: The UK Market

By our calculations, the shortfall in both equity and debt will be more pronounced in the UK than any other European country. Not only did the UK record the largest transaction volume during the run-up to the credit crisis, but it did so with copious amounts of debt with high LTVs. It is therefore no surprise that UK property values have been hit relatively hard by the financial crisis. The current consensus is that values, particularly in Central London, could fall by around 60% from the peak of the credit cycle.

We are in a better position to analyse the commercial real estate debt markets in UK than elsewhere in Europe, thanks to the De Montfort Survey.¹¹ Since 1997, this survey has collected and collated annual data on bank lending to the commercial real estate sector, providing an insight into how debt-based financing has evolved.

Exhibit A1: UK Real Estate Debt Market



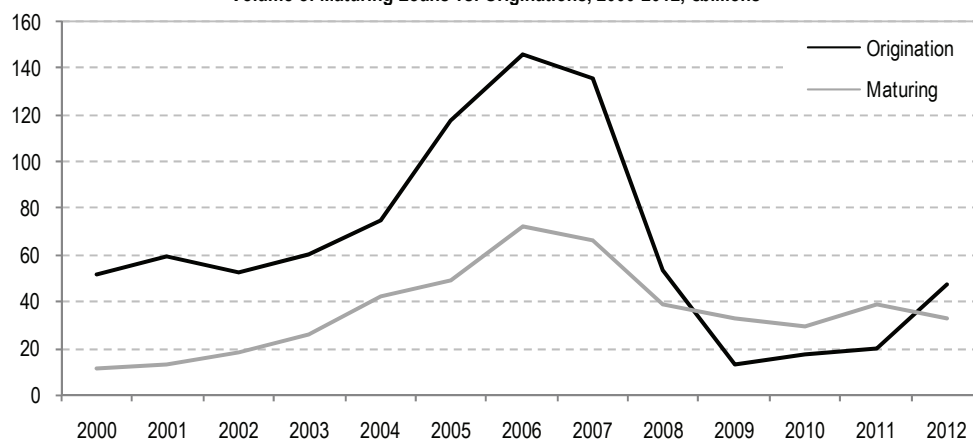
Prudential Real Estate Investors, De Montfort, EIU

As with the broader European analysis, the outstanding volume of real estate debt in the UK is likely to shrink over the near term due to weak GDP growth and tepid lending by banks. The outlook for real GDP growth in the UK is poor in comparison to most of Europe. As such, the total amount of commercial real estate debt in 2012 will remain lower in nominal terms than in 2007. That is not surprising, given how aggressive banks were between 2003 and 2007. Moreover, assuming banks return to 2003 lending volumes, the total outstanding debt stock will decline by more than 30% by 2011 before starting to recover.

¹¹ The De Montfort Survey separates bank debt and CMBS. Our model assumes that the total stock of bank debt as a percentage of GDP returns to 2003 levels by 2011. To project forward origination, we take the change in stock series implied by the ratio to GDP and assume that repayments are made in line with their historical average (about 20% per year). Projections for maturing debt are taken directly from the De Montfort Survey. CMBS historical data is taken from both De Montfort and DTZ. Historical maturing CMBS debt is zero, given the relatively small size of the market, and the fact that collateral is generally longer dated. Projected origination is then assumed to be zero in 2008/09 before recovering slightly in 2010/11/12. Projections for maturing debt are again taken from published debt maturities.

Exhibit A2: UK Real Estate Debt Capital Market

Volume of Maturing Loans vs. Originations, 2000-2012, €billions



Prudential Real Estate Investors, De Montfort, DTZ, Merrill Lynch

The drop in lending volume and size of the debt shortfall are significant. New originations in the UK are expected to plummet an astounding 91%, from €145 billion in 2007 to just €13 billion in 2009. And origination will not pick up much any time soon, as volume in 2010 and 2011 will remain close to the numbers recorded around the start of the decade.¹² The cumulative debt shortfall is expected to be about €20 billion in 2009 and €50 billion in 2011.

Exhibit A3: Estimating Debt and Financing Gaps in UK Real Estate, 2009-2012, €billions

	2008	2009	2010	2011	2012	Annual Average % Change
Total Real Estate Debt Outstanding	288	249	221	197	206	-8.1%
Originations†	53	13	18	20	47	
Volume of Maturing Debt	38	33	30	29	33	
Debt Shortfall (cumulative)*		20	31	50	35	

†Originations based on change in total real estate debt outstanding, adjusted for amortization of existing loans

*Calculated as the difference between originations and maturing debt, aggregated over time

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¹² In euro terms. The projections assume a fixed GBP/EUR exchange rate at end 2008 levels, which was nearly 15% less than in 2007. In sterling terms, origination volumes recover to about 2004 levels.

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Prudential Real Estate Investors
8 Campus Drive
Parsippany, NJ 07054
USA

Tel 973.683.1745
Fax 973.734.1319
Web www.prei.com
E-mail prei.reports@prudential.com

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