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The Treatment of Covenant Strength by the UK Property Industry

Research findings

August 2009

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This programme supports the IPF's wider goals of enhancing the knowledge, understanding and efficiency of property as an investment class. The initiative provides the UK property investment market with the ability to deliver substantial, objective and high quality analysis on a structured basis. It will enable the whole industry to engage with other financial markets, the wider business community and government on a range of complementary issues.

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THE TREATMENT OF COVENANT STRENGTH BY THE UK PROPERTY INDUSTRY

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THE TREATMENT OF COVENANT STRENGTH BY THE UK PROPERTY INDUSTRY

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1.0 INTRODUCTION

1.1 Context of the research

Since the summer of 2007, events in global financial markets have highlighted the volatility of both the commercial and residential real estate markets. The period from mid-2007 to the end of 2008 witnessed sharp corrections in property values at a time of unprecedented turmoil in the financial markets resulting in a major reduction in the availability of credit. The UK economy has entered a period of recession with the inevitable impact on business and consumer health, despite interest rates being cut to their lowest levels for over 300 years.

The downturn in both commercial and residential property markets, together with the emergence of the 'credit crunch', have brought into sharp focus the importance of the security of the income stream in the pricing of real estate. In the traditional method of valuation, all risk factors are implicitly integrated within the All Risks Yield (ARY) which is obtained from sales comparables, often with only limited knowledge of the details associated with the transaction, such as the covenant strength of the tenant or the investment strategy of the purchaser.

The fact that the explicit contribution of risk factors, such as covenant strength, to the initial yield when valuing a commercial property investment does not have a major coverage in the literature has prompted calls for more rigorous risk assessment measures within the broad realm of property pricing. The increasing focus on property lending risks highlights the growing macro-economic argument that monetary policy should aim to reduce the amplitude of asset price cycles by trying to spot bubbles. The role of valuers and property market analysts in identifying such risks and reporting them to clients now takes on even greater significance.

Concerns have been raised that the profession needs to provide additional risk evaluation which should then be reported to the client. More specifically Basel II requires banks to develop property lending rating systems as part of internal assessments of their equity capital. Further concerns have arisen from rapid changes in capital markets and technological sophistication of complex syndicated lending on mega-projects in the post-Enron environment. This highlights the need for more rigorous risk identification techniques targeted on the credit worthiness of both project sponsors and property occupiers.

Previous work by the authors (Hutchison *et al*, 2007) based on the analysis of 2005 IPD UK data, found no identifiable relationship between the initial yield (or equivalent yield), and the credit risk score, despite clear differences in the credit risk scores among the tenants. A reasonable hypothesis might have expected some relationship, but this appears to have been overwhelmed by the weight of money seeking a home in the property sector in this year.

Prior to 2007 the UK commercial property market was characterised by 'a wall of money' chasing limited prime product and producing high total returns. In contrast, the explicit impact of covenant strength on initial yield was not a major consideration of the investment market. However, as anticipated on the basis of previous experience, this situation has changed dramatically in a falling market. The changing market conditions, instigated by the collapse of the sub-prime market in the USA which led to a severe reduction in the availability of credit, has resulted in a dramatic fall in investor demand and uncertainty in the pricing of property assets. The increased cost of short-term finance has removed highly leveraged buyers from the market thereby reducing the number of those bidding for property and forcing owners who cannot service their debt to sell. The result is significant volatility and uncertainty in the market and an increasing focus on credit worthiness (Property Week, 2007).

This leads to an interesting comparison with the property market of the early 1990s when, at that time, the market was blighted by a high percentage of over-rented investments[1] and as a result, covenant strength was considered a key risk component and the yield was directly influenced by the calibre of the tenant. A more thorough analysis of covenant strength has the potential to identify likely areas of tenant default thus providing investors with additional information in advance of changes in both the business and property cycles.

1.2 Research aim

The aim of the research is to evaluate from a theoretical perspective how the property industry should treat covenant strength and then to undertake an analysis of how the industry currently adjusts for this risk factor.

The industry viewpoint is considered from the perspective of three different parties:

- the valuer – who is trying to establish market value
- the investor – who seeks to calculate worth
- the lender – who is concerned with the income cover ratio and the risk of default

In framing the analysis the following key research questions are addressed:

1) How volatile are credit scores over time and what are the sectoral differences?

2) How does the treatment of covenant strength move with the stages of the property cycle?

3) How important is the sector in determining the treatment of covenant strength?

4) Should lenders always be more concerned with the risk of default or with other factors such as the quality of the building itself?

5) What is the appropriate time horizon in which to consider covenant strength?

1.3 Structure of the report

The report is organised into eight sections including the Introduction (Section 1.0). Section 2.0 puts the study in theoretical context by considering covenant strength within property pricing. Section 3.0 focuses on the broad area of liquidations, default and delinquency. A quantitative analysis of covenant strength based upon IPD data is presented in Section 4, while Sections 5.0 and 6.0 and 7.0 outline the valuer's, lender's and investor's perspectives on covenant strength respectively. Section 8.0 presents the conclusions and recommendations.

[1] In 1992 approximately 85% of the City of London offices in the Investment Property Databank were over-rented (IPD, 1993)

2.0 PROPERTY PRICING AND COVENANT STRENGTH

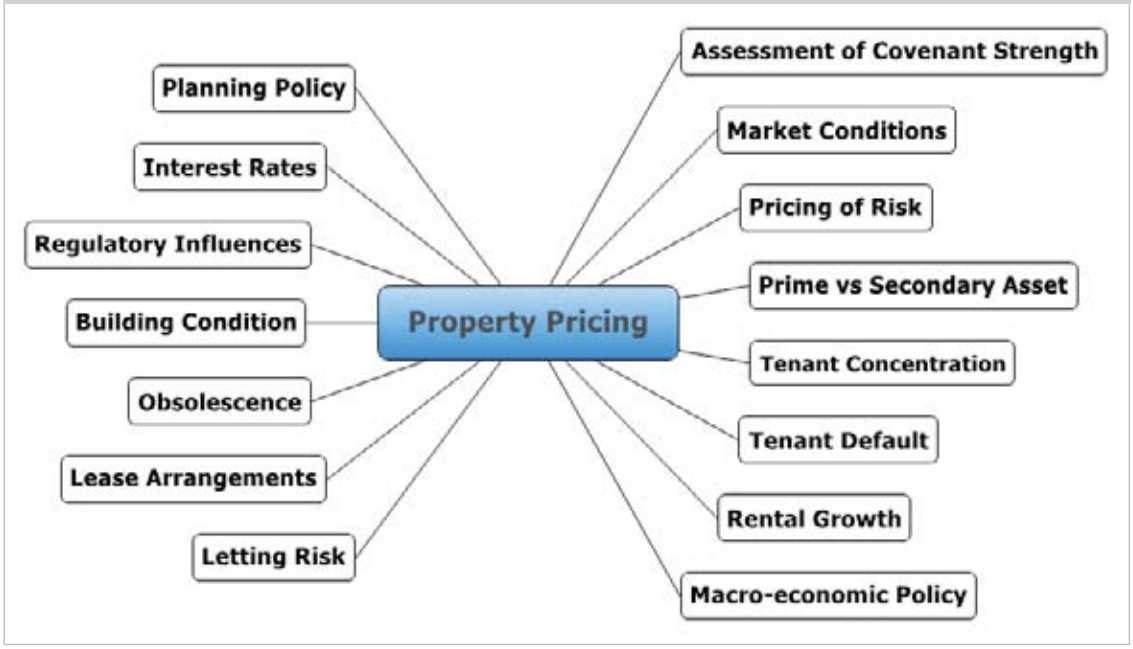
2.1 Introduction

In this section the theoretical concepts underpinning covenant strength are considered in terms of a normative framework for the practice of property pricing. Wider influences relating to economic and property cycles, market efficiency and the treatment of systematic and specific risk are also considered as they impact on covenant strength. The initial yield is deconstructed to highlight the risk premium.

2.2 Factors influencing covenant strength

A key element in a normative model of property pricing focuses on cash flow risk and the factors that influence the covenant strength of the party contracted to pay the rent. Cash flow risk is affected by both exogenous and endogenous factors. Exogenous factors comprise for example, general economic conditions, finance rates, level of taxation and legislative changes. Normally of greater significance are endogenous factors such as, tenant, location, prospects for rental growth, building condition, obsolescence, letting risk and lease arrangements (Figure 2.1).

Figure 2.1: Important factors relating to property pricing



2.3 Economic and property cycles

Market conditions and the stage in the economic and property cycles are major influences on the security of cash flow and covenant strength. The UK real estate boom of 1986–1988 with the follow-on slump of the early 1990s prompted renewed research into property cycles and highlighted links with economic cycles. Key *et al* (1994) state that the "property cycle feeds directly off the economic cycle at key points" (pi). For example, changes in output and employment will drive the occupier markets and changes to financial markets, have direct effects on yields and investment asset allocations. If some links between the economy and real estate markets were to be taken in isolation then there would be a direct relationship between cycles, however due to some of the instabilities and lags associated with the real estate industry there is often a difference between the two cycles.

2.0 PROPERTY PRICING AND COVENANT STRENGTH

Some of the modelling work carried out by Key *et al* (1994) suggested that in the occupier markets cyclical demand side factors such as GDP and consumer spending are a primary influence on rental values while in the investment markets, the external drivers are bond yields and inflation, which are significant influences on both real estate yields and on the level of real estate investment by UK institutions.

Gardner (1993) states that "real estate markets tend to overreact to economic trends for a number of reasons, leading to 'boom and bust' cycles. Under these conditions, successful investment is all a manner of watching two business cycles–the local economy and real estate–and making the right moves at the right time" (p43).

Research by Scott and Judge (2000) found that real estate values follow a cycle of 7.8 years on average, although such accuracy maybe somewhat misleading. They found that real estate crashes (1974 and 1990) represented negative shocks to the cycle but did not prove to alter the cycle pattern to any great extent due to their timing being in cyclical downturns. However, what did have a major impact were the investor's expectations on the mean value of real estate, and this demonstrated long term effects after the periods of the real estate crashes. Various policies aimed at reducing the risk of future crashes were mentioned by Higgins and Osler (1997) such as monetary policy and tax policy, and by Scott (1996) highlighting planning policy, monetary policy and regulation of real estate company accounting standards.

Barras (1994) considers major building booms as the consequence of the convergence of market conditions involving strong demand growth, supply shortages and credit expansion. Allen (2005) considers how financial instability can have an enormous adverse impact on the economy, with one of the major causes of such instability being the expansion of the availability of money and credit, creating asset price bubbles. This is of particular significance given the current turmoil in the global banking sector which has manifested in changes in lending practice, pre- and post-August 2007.

Research by Zinn and McMahon (1998) suggests that as with other markets, fluctuations in the property market can add/subtract from the lender's earnings. It states that "through careful consideration of cash flow, knowledge of market needs, attentive monitoring, and loan pricing commensurate with risk, real estate lending can be a viable and profitable business" (p86). It is simple to see why the lenders had been so keen to lend to commercial property investments as this was considered a profitable part of their business up until August 2007.

In the eyes of the practitioner the importance of covenant strength differs during the stages of the economic cycle. When the market is performing well with strong demand and limited supply of space, less consideration may be given to the strength of the covenant, as in the event of default, there is less risk of a lengthy void period as the property should relet quickly. However, when the economy is in a downturn, a strong covenant is a key requirement, as the risk of default rises, reletting prospects maybe poor and void periods increase. In such times more in-depth analysis of tenants and careful evaluation of risk premiums are likely to form part of any property valuation process. The key question though is whether this type of analysis should be always carried out, with one eye on the point in the cycle when the investment is being made and the other eye on the likely state of the market at the end of the planned holding period. Should the practitioner be considering how covenant strength will be affected during the 'wave length' of the cycle?

2.4 Market efficiency

It is important at this point to reflect on the level of efficiency of the property market. In an efficient market the market price is an unbiased estimate of the value of an investment. If all the information relating to an investment was available and information was analysed in a similar manner then the pricing would be expected to be similar. However, in the property market this does not happen and investors look for mispriced assets as an opportunity for making a superior return.

Fama (1970) suggested that there were three main forms of market efficiency; weak form, semi-strong and strong-form efficiency. Weak form efficiency considers that all prior information is available on pricing of assets or markets and is therefore reflected in the current pricing. In the commercial property market there has been little empirical work to calibrate the efficiency of the market, but the notion that the property market demonstrates a weak form of efficiency is generally accepted (Gatzlaff and Tirtiroglu, 1995). Ball *et al*. (1998) suggests that there is "some limited evidence to suggest the UK property market meets the criteria for weak form efficiency, there is no suggestion that it is as efficient as other investment markets" (p282).

Wang (2000) considers present value models when investigating market efficiency in the property market and is concerned more with capital value and future income compared with other studies on market efficiency. The paper states that "the existence of 'rational bubbles' in the UK property market is ruled out at statistical significance levels, though the UK property market appears not efficient. In addition, there are variations among the office, retail and industrial property markets. The rejection of the present value model implies a price discovery mechanism may exist for property investment" (p185).

2.5 Systematic and specific risk

Portfolio theory argues that it is possible to eliminate a substantial amount of the investment/pricing risk by the process of efficient diversification. Two main types of risk are identified; systematic risk which remains after diversification and specific risk which can be eliminated through a wide diversification strategy.

The systematic risk components comprise the exogenous factors outlined in Section 2.2 above whereas specific risks concern those factors which are unique or endogenous to the property itself. As the latter can be diversified away by holding a large number of properties, the investor cannot be expected to be rewarded for bearing these risks and therefore it is the only the systematic risk component that requires to be compensated.

Baum and Crosby (2008) usefully introduce the notion of "semi-systematic risks" (p39), most notably sector risk. Due to the high lot value associated with property investment, significantly large sums of money can be tied up in one particular sector. Return performance differs across sectors, as the economic cycle impacts upon rents and yields. Moreover, due to the large lot size most property portfolios are not sufficiently large to completely remove specific risk (IPF 2007a). In consequence, portfolio managers need to be aware of the differing volatility in returns between the sectors and across geographical areas. For example, against the IPD All Property universe, the property beta coefficient for West End and Mid Town Offices was 1.43 compared with 0.73 for Shopping Centres over the period 1981 to 2007 (IPD).

The asymmetric risk profile of real estate pricing across the property cycle and the economic cycle is highlighted by the fact that downside risks related to covenant strength, such as the default risk, are greater in an economic downturn and more prevalent across some market sectors than others. Variability in lease length further

complicates the relationship. In the up-cycle, lease length normally becomes less relevant, as there is a higher probability of re-letting, rental growth prospects increase and risk of default declines. In contrast in the down-cycle the significance of these covenant strength characteristics increases.

2.6 Yield construction and the risk premium

In the implicit method of valuation, all risks are encompassed within the 'All Risk Yield'. The selection of the yield is complicated and requires the assessment of a number of factors, some systematic and some specific to the property.

Based on the work of Fisher (1930), the overall return on an investment is a reward for three factors: loss of liquidity (l), compensation for anticipated inflation (i) and a risk premium (p). These risk factors are offset to a greater or lesser extent by prospects for rental growth (g).

Thus: $y = l + i + p - g$ (1)

In order to simplify this equation, a risk-free rate is used as a proxy for the loss of liquidity and anticipated inflation risk, with the redemption yield on conventional gilts (c) usually adopted.

$$y = c + p - g \quad (2)$$

This then exposes the risk premium and rental growth to research. The level of risk premium required is a key focus of this paper and depends upon the market, the sector and individual property characteristics. Covenant strength risk should be evaluated and the risk of default over conventional gilts should be priced and included in the risk premium.

Following on from the work of Baum (1988), an allowance for depreciation risk is added to compensate for both physical deterioration and obsolescence.

$$y = c + p - g + d \quad (3)$$

In a normative process the initial yield of a property investment can be constructed by considering each of these inputs. The result can then be compared with an analysis of prevailing market yields which may be significantly different. If so, it would suggest that the market takes a differing view on either the level of risk premium, prospects for growth or depreciation and the market price may be at odds with the underlying investment worth to the investor. Pricing in the UK property market during the period 2003 to 2007 saw initial yields being driven to very low levels. While part of this yield shift could have been a fall in the risk free rate, it is argued that investors were applying either a negligible risk premium or hugely optimistic rental growth prospects. It has also been suggested that some investors were 'surfing the yield curve' in the belief that the market was being driven higher on sentiment rather than fundamentals and that they would enjoy the upside and exit before a correction took place.

2.7 The property market correction – the "triple dip"

The current correction in the property market is driven by two distinct influences which have run in parallel. Prior to mid-2007, the investment market had been driven in an upward trajectory by the 'yield chasing' investors supported by sizeable leverage. Risk premium differences between sectors, prime and secondary locations, and covenants, had narrowed alarmingly. A correction in market pricing was in process when the debt bubble burst and the lack of liquidity resulted in a drastic reduction in the availability of capital funds for the acquisition or re-financing of assets, leading to a further correction in capital values. The third influence which is likely to impact

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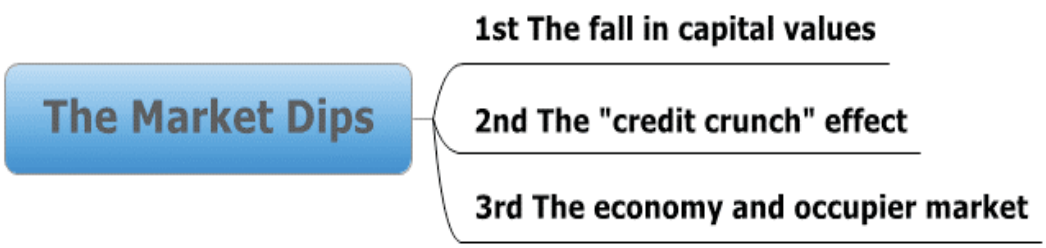
capital values is expected to come from the occupier market, as the effect of recession dampens demand for space, reducing rental growth and increasing the risk and duration of voids. In overall terms, such a scenario increases the risk attached to the receipt of cash flow and will reduce the attractiveness of property investments, impacting negatively on price (Figure 2.2).

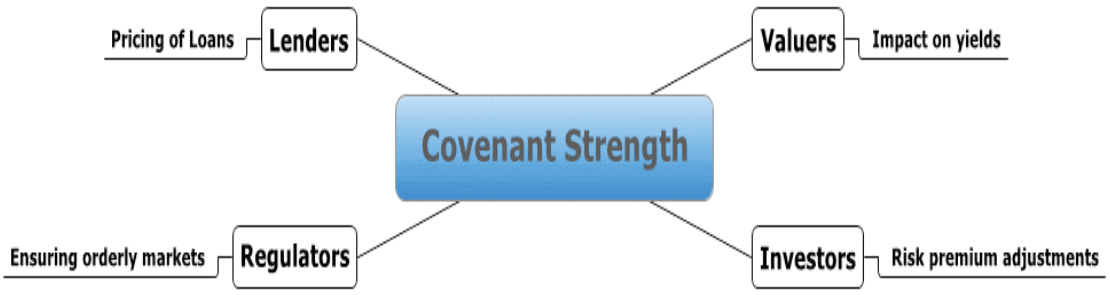
Figure 2.2: Property market dips



Income is the key driver of property return. Over the 26 year period 1981 to 2007, IPD UK average total return was 10.7% p.a., with income return at 6.6% p.a. (standard deviation 1.0%) and capital growth 4.1% p.a. (standard deviation 8.1%). The stability of the income return is one of the key features of real estate both as an investment and as a security, hence the importance of evaluating covenant strength in the risk pricing process.

For the years leading up to the correction in the market in 2007, there was a suspicion that covenant strength had not always been given adequate consideration across the range of market actors involved in the pricing of real estate (Figure 2.3). It is a key aim of this research to give exposure to this issue, in order that this aspect of market inefficiency might be reduced.

Figure 2.3: The relationship of covenant strength between professions



2.0 PROPERTY PRICING AND COVENANT STRENGTH

Key messages:

- Covenant strength factors such as security of cash flow, risk of default and lease length are central to a normative property pricing model.
- The property cycle directly feeds off the economic cycle. Bond yields and inflation are key drivers of property yields and investor sentiment. GDP, consumer spending (retail), financial and business services (office), manufacturing activity (industrial) are a primary influence on rental value.
- The economic cycle impacts on the ability of occupiers to pay the contracted rent. At the portfolio level fund managers need to be aware of the differing volatility in returns between the sectors and across geographical areas, which may stress the income return component. The systematic risk should be appropriately priced.
- The property market demonstrates a weak form of market efficiency, with opportunities for investors to exploit mispriced assets.
- Covenant strength risk is perceived as more significant in an economic downturn and more prevalent across some market sectors than others. In the down-cycle lease length normally becomes more relevant, there is a lower probability of re-letting, rental growth prospects decline and risk of default increases.
- Covenant strength risk should be properly evaluated and the additional risk of default over conventional gilts should be priced and included within the risk premium, a component of the initial yield extensively used in property pricing models.

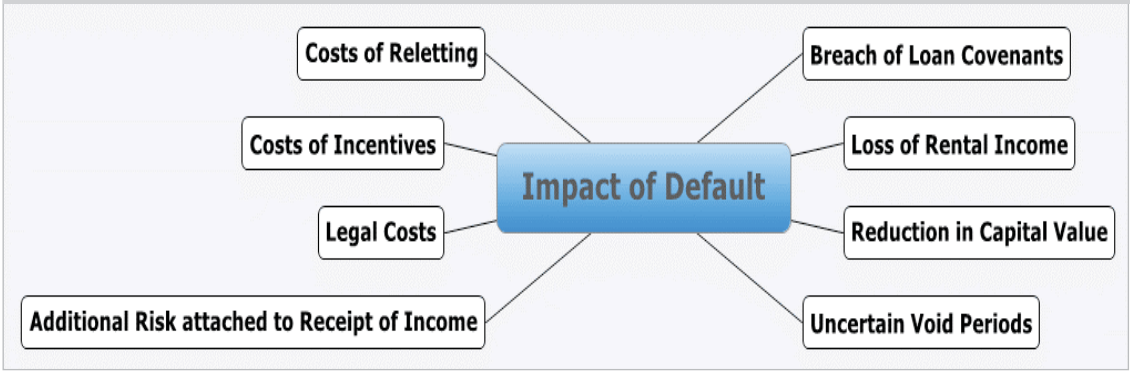
3.0 THE IMPACT OF DEFAULT

3.1 Introduction

The level and impact of default is fundamental to this research project, as it underscores the reasons why covenant strength should be properly evaluated and priced. This section focuses on the level of company liquidations and the degree of delinquency, and reflects on the impact the current economic recession could have on default rates.

It is self evident that investors, lenders and borrowers should require credit reference checks on tenants, carried out internally or by credit reference agencies so that they can rate their tenants in an attempt to minimise defaults in rental payments and where appropriate, adjust any risk premium or pricing of loans to reflect this. This is considered in more detail from the investor's and lender's perspective later in the report. The impact of tenant default on commercial property investment has significant implications to future incomes. These are highlighted in Figure 3.1:

Figure 3.1: Impact of default



3.2 Insolvency Service data

To put the likelihood of default in context requires an understanding of the level of insolvency. The Insolvency Service provides information on a quarterly basis on liquidations and insolvencies on both a corporate and individual level. The 4th quarter 2008 results for England and Wales[2] disclose 4,607 compulsory liquidations and creditor's voluntary liquidations, which was an increase from the previous quarter of 11.9% and an increase of 51.6% on the previous year.

Of the 4,607 company liquidations, 1,562 were compulsory liquidations and 3,045 creditor liquidations for Q4 2008 (Table 3.1). The table also illustrates the % increase of compulsory company liquidations of 34.4% from Q 4 2007 and 4.5% increase from the previous quarter in 2008. The creditors voluntary (the first insolvency procedure entered into) also showed increases of 62.2% from Q4 in 2007 and an increase of 16.1% since Q3 2008. Many of those companies who are insolvent will occupy let space and their demise will directly reduce landlords' cashflow. Knowing which of these tenants is more likely to default is a key part of portfolio management.

[2] Data on Scotland can be accessed at Companies House (Scotland) and for Northern Ireland from the Department for Enterprise, Trade and Investment, Northern Ireland.

3.0 THE IMPACT OF DEFAULT

Table 3.1: Company liquidations in England and Wales (seasonally adjusted)

						% change to Q4 2008 from	
	07Q4	08Q1	08Q2	08Q3	08Q4	Q4 2007	Q3 2008
Company liquidations	3,039	3,172	3,639	4,118	4,607	51.6	11.9
of which: compulsory	1,162	1,098	1,340	1,495	1,562	34.4	4.5
creditors voluntary[2]	1,877	2,075	2,299	2,623	3,045	62.2	16.1

The level of company liquidations in England and Wales over the period 1989 to 2008 peaked at 2.6% in 1992. Since that time the annual rate of companies going into liquidation has continued to decrease. The level at 2008 was less than 1% of all the active companies on the register but this is expected to show a sharp rise in 2009/10 as the full effects of the recession are felt.

While the Insolvency Service data shows relatively low levels of liquidation, it gives no insight into the financial difficulties firms may be experiencing short of going into liquidation. Moreover, this data is not available in recognisable sector level format. It was therefore considered that data from Dun & Bradstreet on failure and delinquency levels would be more useful when considering how certain companies and sectors may be affected by defaults and by any downturn in the market.

Understanding any differences between the default rates of the sectors is a key ambition of this research. Some sectors are likely to have a higher probability of insolvency and delinquency in a recessionary market. The risk of default may be a function not only of the specific financial health of the company but be affected by sector, asset size and age of the company. Looking closely at the probability of insolvency and delinquency may give landlords an early warning signal of potential default, enabling them to better manage their risks and avoid over exposure to any one single tenant or sector. If covenant strength risk is to be correctly priced then all factors should be understood and weighted in any pricing model.

3.3 Dun & Bradstreet results

Dun & Bradstreet (D&B) were commissioned to investigate the levels of insolvency and delinquency rates among UK companies over the period March 2006 to September 2008. For the purposes of this report, six main sectors have been selected for illustrative purposes. The sectors considered were heavy construction, warehousing (industrial sector), food and clothes retailers (retail sector), financial institutions, business services, government (office sector) and are compared against the overall mean for all companies.

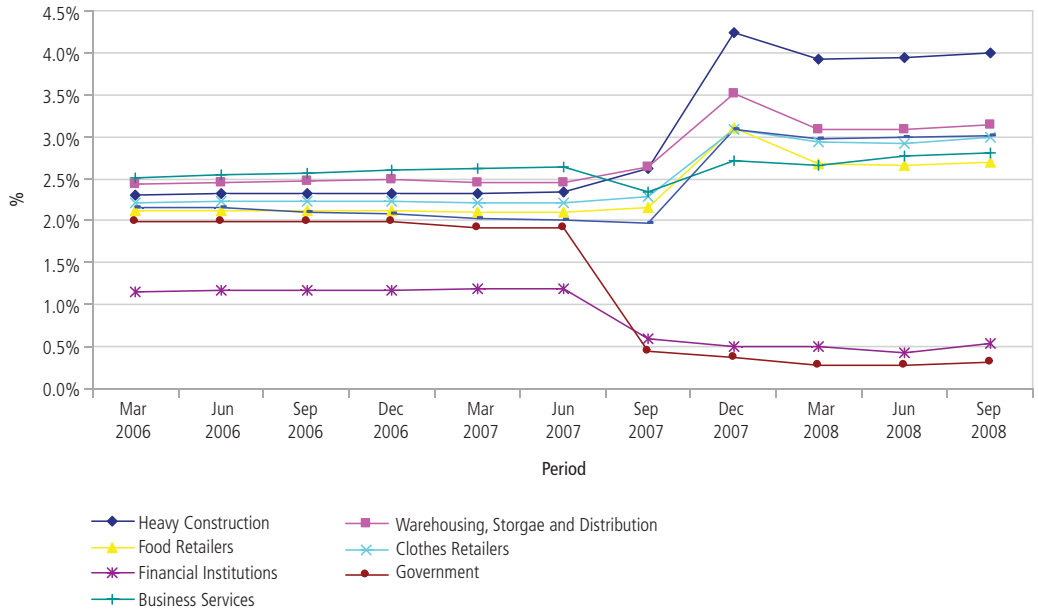
D&B define an insolvent company as one which hits at least one of the following events:

- ceased operations following assignment of insolvency
- ceased operations with loss to creditors
- voluntarily withdrew from business operations leaving unpaid obligations
- is in receivership, reorganisation, or has made an arrangement for the benefit of creditors.

3.0 THE IMPACT OF DEFAULT

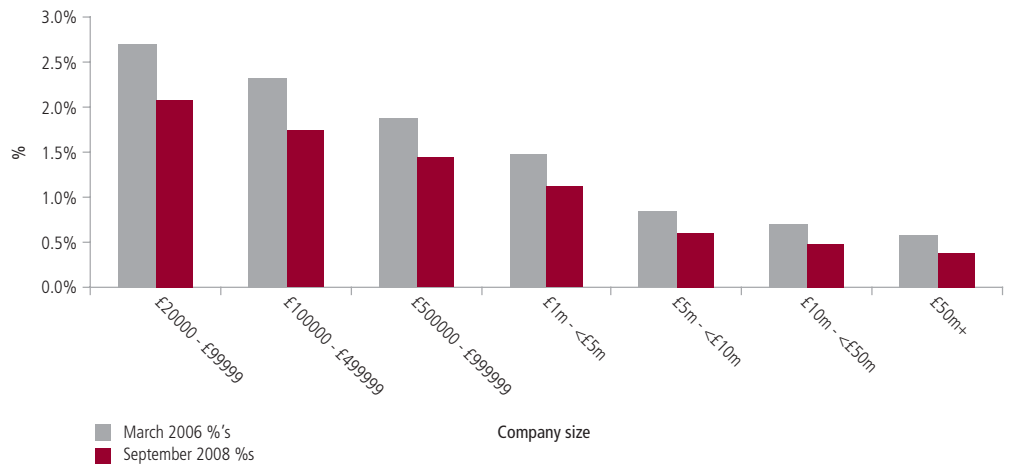
The probability of insolvency of the selected sectors, monitored on a quarterly basis from March 2006 to September 2008, is shown in Figure 3.2. It can be seen that for most sectors the probability of insolvency was between 2% to 2.6% up until June 2007, with the exception of the financial institutions whose probability of default was 1.2% until June 2007, but then decreased significantly to below 0.5%. In the period from June to September 2007, the probability of insolvency for all other sectors increased, with heavy construction showing the highest levels of 4.3% in December 2007 and at 4% in September 2008. This is indicative of the downturn in the property development market at this time.

Figure 3.2: Average probability of insolvency – selected sectors – March 2006 to September 2008



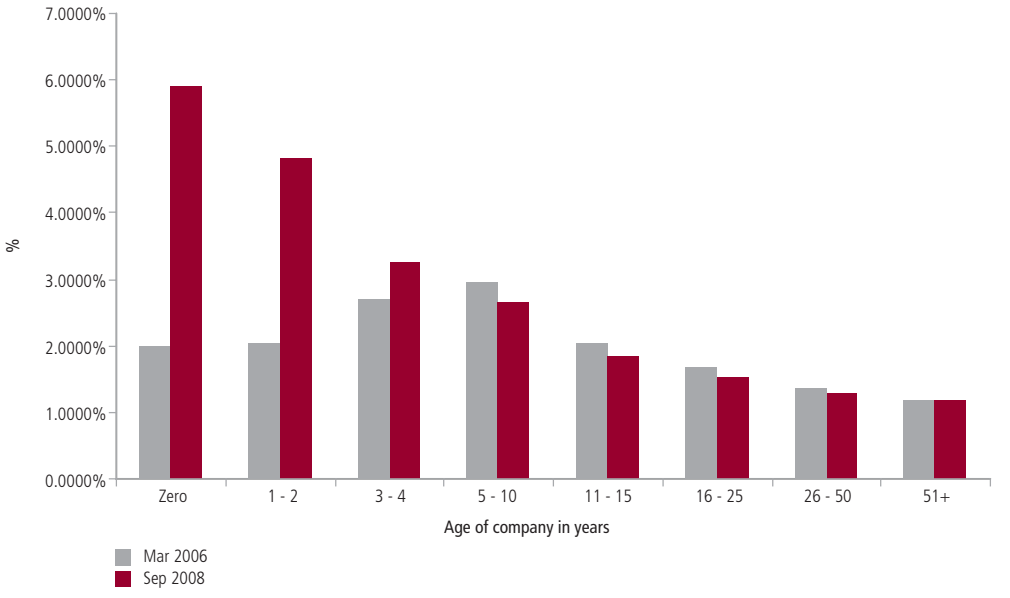
The average probability of insolvency by company size for all companies is illustrated in Figure 3.3. For illustrative purposes March 2006 has been compared to September 2008 to highlight the changes within this time frame. Not surprisingly, the probability of default decreased the larger the asset size of the company. What is surprising is that the September 2008 figures are lower than those at March 2006. However, this appears to be the result of a data collection change by D& B who commented that over the period a number of companies were moved from an 'undetermined' into a known category once more information was obtained.

Figure 3.3: Comparison of average probability of insolvency by company size for March 2006 vs September 2008



The average probability of insolvency by company age and the change from March 2006 compared to September 2008 is shown in Figure 3.4. The results from September 2008 are in line with expectations – the younger the firm the higher risk of financial distress, confirming the higher risk among start up firms. A newly registered company as at September 2008 had an average 6% probability of insolvency whereas companies with an age of 26+ years produced results of 1.2%. What is interesting about these results is the differing shape of the results between 2006 and 2008. In 2006, the highest probability of insolvency was among firms of five to 10 years old, but by 2008 'normal order' had been resumed with the youngest firms being the most vulnerable.

Figure 3.4: Comparison of average probability of insolvency by company age for March 2006 vs September 2008

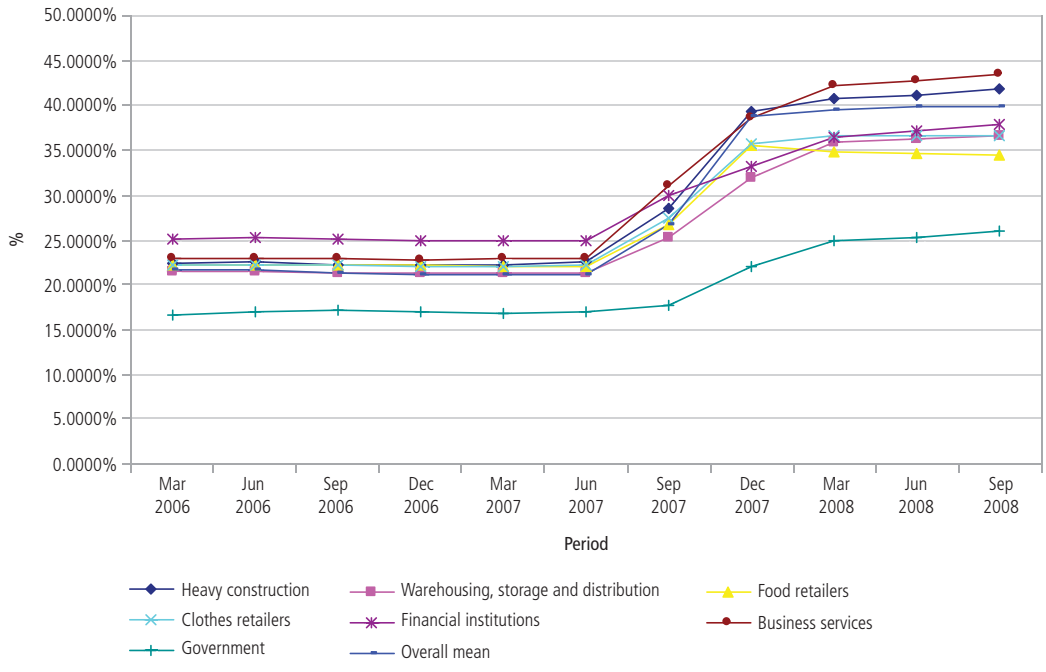


3.0 THE IMPACT OF DEFAULT

D&B carried out similar work but examining companies from a delinquency framework whereby they consider a severely delinquent firm as a "business with less than 75% of its trade experiences paid in a satisfactory manner (prompt or within 30 days) and at least 10% of its payments 90 days or more past due or one or more events classified as leading to failure". This is a crucial indicator as it gives insight into the financial health of a company and acts as an early warning system on potential defaults. However, it is recognised that the tactic of delaying payments may also be used by healthy companies, who may decide to take advantage of their significant purchasing power to force suppliers to accept less prompt payment.

Figure 3.5 illustrates the average probability of delinquency for the same selected sectors as outlined above. In the periods to June 2007, the average probability of delinquency for all chosen sectors was 22 to 25%, apart from the government sector which was 17%. However, since 3Q2008 there has been a significant increase in the probability of companies likely to become delinquent in making their payments. Business services have seen the highest increase to 43.5% in September 2008 and the government also showing an increase to 25.9% in this period. The overall mean was 21.6% in March 2006 which increased to 39.9% in September 2008. While this analysis is only of a subset of the sectors, it is interesting to note the co-movement – the delinquency risk increased at the same time across the selected sectors.

Figure 3.5: Average probability of delinquency – selected sectors March 2006 to September 2008



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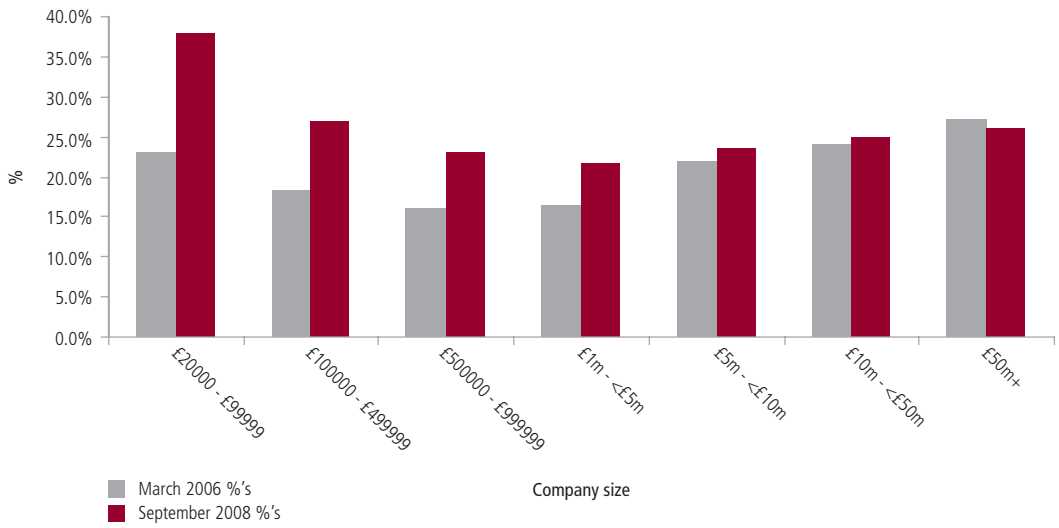
The average probability of delinquency by company size for all companies is illustrated in Figure 3.6. Again, for illustrative purposes March 2006 has been compared to September 2008 to highlight the changes within this time frame. It can be seen that for all business sizes the levels of insolvency increased over the two periods apart from the £50m+ range. For example, small companies, under (£100,000) rose from 23% to 38% and companies of £10m to <£50m rose 1% from 24% to 25%. The exception was companies with an asset size of £50m+, where the probability of delinquency fell from 27% in March 2006 to 26% in September 2008. Overall, the levels of probability of delinquency were higher for smaller businesses and the levels reduced as the business size increased, a result which was expected.

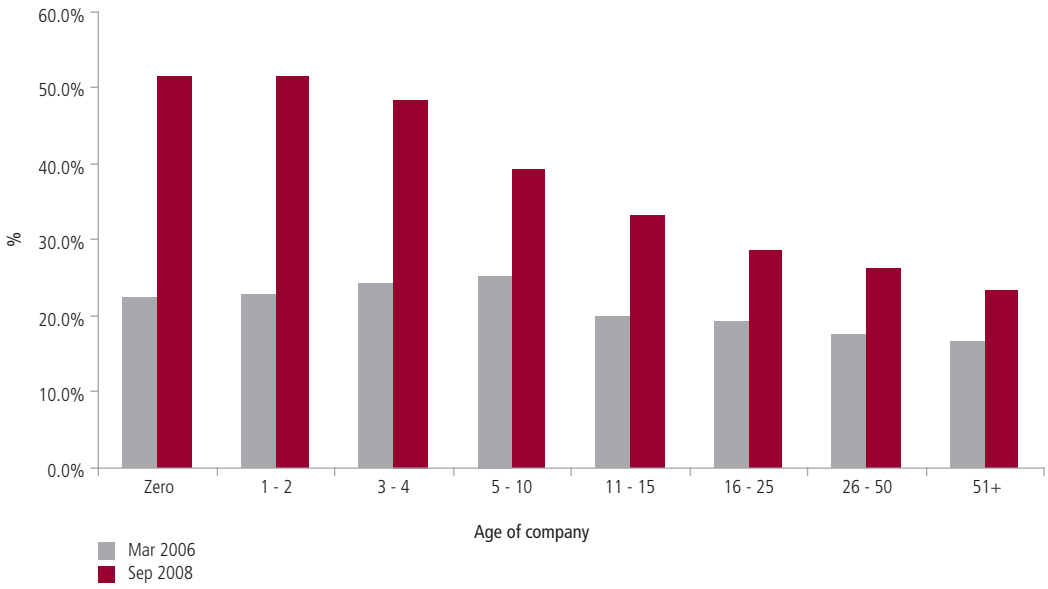
Figure 3.6: Comparison of average probability of delinquency by company size for March 2006 vs September 2008



Finally in this section, Figure 3.7 shows the change in the average probability of delinquency by company age from March 2006 compared to September 2008. As expected the more infant companies showed higher levels of probability of delinquency for September 2008. This is expected as the first three years of a business are a crucial time for a company's survival. A new company had a 23% probability of delinquency in March 2006 compared to 52% in September 2008. Companies of 26+ years produced average results of 17% in March 2008 compared to 25% in September 2008. These numbers are very illuminating and provide the fine grain risk analysis which is essential if the risk of default is to be properly evaluated and priced.

3.0 THE IMPACT OF DEFAULT

Figure 3.7: Comparison of average probability of delinquency by company age for March 2006 vs September 2008



In summary, these results indicate that investors need to be fully aware of a tenant's profile. Some sectors are likely to have a higher probability of insolvency and delinquency in a recessionary market.

Key messages:

- The level of default is fundamental to an understanding of covenant strength due to the impact on future income streams and the value of the property investment.
- In recent decades, the level of company liquidations is relatively low, of the order of 1%, increasing as expected, during recessionary periods.
- The probability of insolvency during most of 2006–07 was between 2% and 2.6%. For certain sectors this increased significantly from June 2007; with the construction sector for example increasing to 4.6% as the current economic downturn took effect. It is thus essential that those involved in the pricing of property interests are aware of the different sector volatility.
- Analysis on the probability of delinquency acts as an important early warning system on potential defaults. Since 3Q2007 there has been a significant increase in the probability of companies likely to be come delinquent. A higher risk weighting should be applied to those sectors that are more volatile.
- On average the probability of financial distress increases for smaller (asset size) and younger companies. Knowing which tenants are more likely to default is a key part of portfolio management.
- Investors need to be aware of over concentration on a single tenant, as while default and delinquency are less probable for larger companies, if default does occur the portfolio impact is likely to be much greater as they are larger occupiers of space.

4.0 QUANTITATIVE ANALYSIS OF THE IMPACT OF COVENANT STRENGTH

4.1 Introduction

IPD were commissioned to carry out an analysis on how yields were affected by covenant strength. Over the analysis period 2003 to 2007, the initial results showed no relationship between equivalent yield and covenant strength. A further analysis was then undertaken combining lease length and covenant strength, with the equivalent yield and the results proved more insightful. Hence, it is these results that are now reported.

4.2 IPD analysis

Lease length periods of 0–5, 6–10, 11–15, 16–20 or 20+ years were used in the analysis. The covenant strength ratings were based on information supplied by Experian and D&B between 2003 and 2007, and the scores were then divided into risk bands consistent with the IPD Rental Information Service (IRIS):

- 0–15 score = High
- 16–55 score = Medium to high
- 56–84 score = Low to medium
- 85–94 score = Low
- 95–100 score = Negligible

The analysis was carried out using equivalent yields extracted from year end valuations over the five year period 2003 to 2007. The analysis included both single let and multi-let properties. With regard to the latter the unexpired lease length was obtained at tenant level and the lease length of multi-let properties was calculated using the average lease term weighted by the rent passing.

Using IPD PAS segments, Table 4.1 illustrates the range of equivalent yields used, comparing the two end points of the risk spectrum. At the one end, high risk tenants on short leases and at the other end, strong covenants on long leases. As expected the low risk covenants let on a long lease, produce the lower yield – a result consistent in nearly all segments across all the years[3].

Table 4.1: IPD banded results – range of equivalent yield movements

	2003		2004		2005		2006		2007	
Segment										
	High	Low	High	Low	High	Low	High	Low	High	Low
Standard Retail S/E	7.01	6.72	6.82	6.24	5.74	5.18	5.20	5.15	6.41	5.48
Standard Retail UK	7.38	7.21	7.01	6.06	5.72	5.78	5.80	5.34	6.79	5.57
Shopping Centre	8.51	8.21	6.94	5.28	5.31	5.78	4.64	5.93	6.86	7.86
Retail Warehouse	7.59	6.60	8.23	6.08	7.00	5.37	5.98	4.89	5.78	5.76
Offices City	6.26	5.53	6.46	6.67	5.28	4.94	5.07	4.22	8.05	6.09
Office W/E	8.25	7.24	6.76	6.09	5.72	6.45	5.23	4.37	5.85	5.56
Office S/E	8.66	6.74	8.24	6.48	7.50	5.09	6.61	4.84	7.79	5.50
Office RUK	9.23	7.59	8.68	6.92	8.02	6.67	6.09	5.91	8.48	5.94
Industrial S/E	9.06	7.05	8.44	6.65	7.54	5.63	6.74	4.81	7.36	5.91
Industrial RUK	10.14	7.27	9.06	6.82	7.79	6.60	7.10	5.41	7.96	6.24
Other	4.74	7.68	5.92	6.49	7.63	5.90	7.94	5.62	4.90	6.59

(The headings "High" and "Low" relate to the covenant strength ratings, high risk and low risk.)

[3] A lack of observations is thought to be the reason why the results for Shopping Centres in 2006 are counter intuitive.

4.3 Significance testing

The full sets of results were tested for significance and no statistical difference was found across any of the sectors. This result indicates significant 'noise' surrounding the composition of the equivalent yield making it difficult to isolate one risk factor.

4.4 Office South East

To illustrate the type of information supplied per sector per annum, Table 4.2 below, shows the data for the Office South East sector for 2007.

Table 4.2: 2007 Office South East analysis

		High	Med-High	Low-Med	Low	Neg
0 to 5 years	No. of props	5	42	156	94	170
	Mean	7.79	7.26	7.40	7.43	7.33
	Std dev	1.26663	0.86287	0.93050	0.89504	0.89568
6 to 10 years	No. of props	13	50	104	80	163
	Mean	6.88	6.91	6.84	6.78	6.62
	Std dev	0.79118	0.69054	0.81855	0.65824	0.74399
11 to 15 years	No. of props	1	10	22	14	70
	Mean	5.39	6.52	6.27	5.95	6.22
	Std dev		1.02001	0.63700	0.61529	0.68927
16 to 20 years	No. of props		1	2		14
	Mean		6.50	5.96		5.84
	Std dev			0.60494		0.48473
20+ years	No. of props			1	3	16
	Mean			4.78	5.44	5.50
	Std dev				0.27469	1.17019

The equivalent yield data is summarised in Table 4.3, and illustrates how the expected rationale has generally worked well in this example. The highest equivalent yield 7.79% was recorded for high risk tenants on short leases and the lowest yield 5.50% for strong covenants on long leases.

Table 4.3: 2007 Office South East equivalent yield summary

Risk		High	Med-High	Low-Med	Low	Neg
0 to 5 years	Equiv yield	7.79	7.26	7.40	7.43	7.33
6 to 10 years	Equiv yield	6.88	6.91	6.84	6.78	6.62
11 to 15 years	Equiv yield	5.39	6.52	6.27	5.95	6.22
16 to 20 years	Equiv yield	n/a	6.50	5.96	n/a	5.84
20+ years	Equiv yield	n/a	n/a	4.78	5.44	5.50

4.4 Industrial Rest of UK

Tables 4.4 and 4.5 show the results for Industrial Rest of UK for 2007.

Table 4.4: 2007 Industrial Rest of UK

		High	Med-High	Low-Med	Low	Neg
0 to 5 years	No. of props	21	113	372	183	130
	Mean	7.96	7.91	7.92	7.72	7.69
	Std dev	0.73833	0.79571	0.64639	0.66279	0.78563
6 to 10 years	No. of props	9	61	163	93	128
	Mean	7.34	7.51	7.36	7.28	7.22
	Std dev	0.44335	0.74746	0.65249	0.71475	0.62144
11 to 15 years	No. of props	9	30	42	37	98
	Mean	7.78	7.06	7.29	6.75	6.86
	Std dev	0.77687	0.66092	0.92028	0.94108	0.67663
16 to 20 years	No. of props	9	18	11	42	
	Mean		6.88	6.93	6.98	6.41
	Std dev		0.59121	0.52295	0.94281	0.57800
20+ years	No. of props	3	3	8	6	24
	Mean	7.09	6.79	5.93	5.33	6.24
	Std dev	1.53448	0.25348	1.22595	0.97316	0.97509

Table 4.5: 2007 Industrial Rest of UK equivalent yield summary

Risk		High	Med-High	Low-Med	Low	Neg
0 to 5 years	Equiv yield	7.96	7.91	7.92	7.72	7.69
6 to 10 years	Equiv yield	7.34	7.51	7.36	7.28	7.22
11 to 15 years	Equiv yield	7.78	7.06	7.29	6.75	6.86
16 to 20 years	Equiv yield	n/a	6.88	6.93	6.98	6.41
20+ years	Equiv yield	7.09	6.79	5.93	5.33	6.24

In some of the sectors, some irregularities were seen or little movement between the equivalent yields were found and this may have been due to the small sample size in some cases.

4.5 Yield shift

The following analysis details the difference in basis points (bps) between the low to high risk profiles for the lease terms of 0 to five, six to 10 and 11 to 15 years, for each year of the analysis from 2003 to 2007 using the IPD segments shown in the tables below. (The lease periods 16 to 20 and 20+ years, and the Shopping Centres and Office City segments were not used due to small or zero sample size).

In the Standard Retail Rest of UK and South East sectors (Tables 4.6 and 4.7), the waxing and waning of the covenant premium is seen very clearly. For example, looking at the 0 to five year lease length band in both sectors, the premium increased between 2003 and 2004, narrowed in 2005, only to increase again in 2006 and 2007. However, the results do require careful interpretation and are to a degree a function of the number of observations. In Standard Retail Rest of UK in 2004, the yield gap between low and high was -66 bps, in other words high risk

covenants were being valued at lower yields than low risk covenants, but the latter had 152 observations, a mean equivalent yield of 6.00% and a standard deviation of 0.82, while the former was based on 5 observations, a mean equivalent yield of 5.34% and a standard deviation of 0.62.

Table 4.6: Standard Retail Rest UK change in bps – low to high

Lease	2003	2004	2005	2006	2007
0 to 5 years	13	61	-12	33	76
6 to 10 years	11	2	2	26	25
11 to 15 years	-9	-66	20	-3	83

Table 4.7: Standard Retail South East change in bps – low to high

Lease	2003	2004	2005	2006	2007
0 to 5 years	8	57	19	6	57
6 to 10 years	19	17	-2	24	28
11 to 15 years	63	-20	16	-4	-44

In all the Office segments (Tables 4.8, 4.9 and 4.10) it has shown that the largest relative shift in yields was seen predominantly in 2003 and 2007, as the market started to correct.

Table 4.8: Office Rest UK change in bps – low to high

Lease	2003	2004	2005	2006	2007
0 to 5 years	5	6	53	-77	97
6 to 10 years	5	-1	12	-23	44
11 to 15 years	32	5	61	65	177

Table 4.9: Office West End change in bps – low to high

Lease	2003	2004	2005	2006	2007
0 to 5 years	67	-10	-32	-39	-37
6 to 10 years	-29	-5	-15	-32	89
11 to 15 years	88	-48	n/a	15	25

Table 4.10: Office South East change in bps – low to high

Lease	2003	2004	2005	2006	2007
0 to 5 years	56	13	-2	-3	47
6 to 10 years	1	-6	3	2	26
11 to 15 years	37	18	13	-9	-83

The industrial sectors (Tables 4.11 and 4.12) are more consistent throughout each five year period of analysis in that there are differences between the low and high risk profiles at most lease lengths, indicating that even at the height of the market in the industrial sector there was still some differentiation being made between high and low risk tenants.

Table 4.11: Industrial Rest UK change in bps – low to high

Lease	2003	2004	2005	2006	2007
0 to 5 years	51	20	1	13	27
6 to 10 years	-12	39	55	65	12
11 to 15 years	56	11	67	67	92

Table 4.12: Industrial SE change in bps – low to high

Lease	2003	2004	2005	2006	2007
0 to 5 years	7	50	37	24	21
6 to 10 years	54	9	21	52	88
11 to 15 years	44	73	73	39	94

In the retail warehouse sector (Table 4.13) the bps change were rather distorted due to the low number of observations rated as high risk.

Table 4.13: Retail Warehouse change in bps – low to high

Lease	2003	2004	2005	2006	2007
0 to 5 years	1	152	82	16	-79
6 to 10 years	33	32	n/a	45	-6
11 to 15 years	58	n/a	18	-21	91

Key messages:

- Overall the results show that higher risk covenants in short lease terms result in higher yields reflecting the higher risk associated with such tenancies, whereas low risk covenants in longer leases produce lower yields reflecting the lower associated risk.
- It is evident that in the early part of the analysis period, across all sectors the market added only a very small additional risk premium to reflect the differences in covenant strength and lease length. This risk premium increased significantly during 2007.
- However, the results are not statistically different suggesting that trying to deconstruct the risk premium into individual components is very difficult due to the large amount of 'noise' in the pricing process.
- At all the phases of the property cycle covenant strength should be subject to rigorous analysis. Clearly in the down phase of the cycle, the risk of default is higher, but it is equally important that in-depth analysis of tenants is carried out in the up phase of the cycle to prevent mispricing of tenant risk at a time when the market is being swept along by 'irrational exuberance' and less thought is being given to the likely performance of the tenants in falling markets.

5.0 THE VALUERS' PERSPECTIVE

5.1 Introduction

This section of the report focuses on the treatment of covenant strength by the valuation profession and reports on a questionnaire survey carried out in the autumn of 2008. The purpose of the questionnaire was twofold. First, to attempt to quantify the basis point change to the equivalent yield that would be applied to valuations under a number of different combinations of covenant strength and lease length and to track any change in margin that may have occurred from December 2006 (the top of the market), to September 2008 (when the market was in full retreat). Secondly, the valuers were asked to rank and comment on any changes to cash flow risks and to advise on how covenant strength is being reported to clients. The responses are split into these two main categories and discussed below.

Questionnaires were sent to leading UK property valuation companies and responses were received from five of these top companies. A total of 38 responses were returned, covering the main sectors Office (15), Retail (8), Retail Warehousing (7) and Industrial (8) based on prime locations in London, Manchester, Belfast and Glasgow. It was considered that this mix of responses was a reasonable proxy for commercial properties types and locations throughout the UK.

5.2 The yield shift

The questionnaire asked the valuers to consider how equivalent yields may have changed between December 2006 and September 2008, by disclosing the change in margins (bps change) under a number of different lease length and risk combinations. For simplicity and consistency, all the locations were described as prime. They were first asked to identify the combination of lease length and covenant risk that would produce the lowest equivalent yield – the 'benchmark yield'– and then show the basis point changes which would be applied to the different combinations of covenant strength and lease length. The purpose of the survey was not to estimate absolute equivalent yields but rather to calibrate the differential between the various scenarios.

For the purposes of this analysis the high risk credit rating scores of 0–15, and low risk credit rating scores of 85–100 were used.

The results were of no surprise and indicated a rational reflection of the increasing risk. For the majority of the returns for both December 2006 and September 2008, the benchmark yield was considered to be an investment with a low risk tenant and a 20 + year lease. The equivalent yields increased as the lease length shortened and as the tenant risk increased, but while the steps were incremental, they were not uniform. The 2008 results showed a significant increase in the differential between the various scenarios, compared to that recorded in 2006, reflecting a changing attitude to covenant strength risk in the down phase of a property cycle. Samples of the results are detailed below in Tables 5.1 to 5.4.

The responses on City Offices show that for a short lease (0 to five years) with high risk tenants, the valuers in December 2006 would have added a risk premium of 140 bps over the benchmark yield, but that by September 2008 this was being priced at 200 bps – an increase of 60 basis points.

Table 5.1: City Offices yield shift in bps

City Offices	2006		2008	
Lease	**High risk**	**Low risk**	**High risk**	**Low risk**
0 to 5 years	140	90	200	156
6 to 10 years	103	49	169	113
11 to 15 years	78	33	131	46
16 to 20 years	53		100	25
20+ years	40	0	81	0

5.0 THE VALUERS' PERSPECTIVE

All locations in the retail sector produced similar changes to the margin over the benchmark yield between 2006 and 2008, although the changes were less pronounced than the office sector. For example, in the retail sector in 2006, high risk tenants and short leases of six to 10 years were being valued with an additional risk premium of 73 bps which had moved out to 130 bps in 2008, compared to City Offices of 103 bps in 2006 and 169 bps in 2008.

Table 5.2: Retail sector yield shift in bps

Retail sector	2006		2008	
Lease	High risk	Low risk	High risk	Low risk
0 to 5 years	93	45	163	81
6 to 10 years	73	26	130	52
11 to 15 years	57	13	106	32
16 to 20 years	44	1	89	9
20+ years	38	0	73	0

The retail warehouse sector revealed a higher yield shift than the retail sector–an expected result given current market conditions in the bulky goods sector. In the retail warehousing sector in 2006, low risk tenants with a six to 10 year lease were being valued with a risk premium of 25 bps which had moved out to 68 bps by 2008. This was more than the retail sector where the same profile attracted a risk premium of 26 bps in 2006 and 52 bps in 2008.

Table 5.3: Retail Warehouse sector yield shift in bps

Retail warehouse sector	2006		2008	
Lease	High risk	Low risk	High risk	Low risk
0 to 5 years	89	54	171	114
6 to 10 years	71	25	142	68
11 to 15 years	58	12	121	39
16 to 20 years	47	0	100	14
20+ years	44	0	93	0

The industrial sector produced considerable changes in yield movements, comparative to that of the overall office sector. The risk premium for the short lease (0 to five years) with a high risk tenant moved from 110 bps in 2006 to 236 bps in 2008. The valuers had therefore considered this to be the riskiest of all profiles at September 2008.

Table 5.4: Industrial sector yield shift in bps

Industrial sector	2006		2008	
Lease	High risk	Low risk	High risk	Low risk
0 to 5 years	110	53	236	129
6 to 10 years	92	35	198	89
11 to 15 years	73	17	159	51
16 to 20 years	57	3	126	22
20+ years	54	0	111	0

5.0 THE VALUERS' PERSPECTIVE

The valuers were asked to explain the rationale for any basis point change. There was consensus that in December 2006 there had been so much appetite for property investment coupled with a large supply of cheap debt, that normal valuation mechanics and methodology were effectively ignored in many cases. It was reported that at the top of the market investors were not looking to discount so much for poorer covenants and shorter lease lengths. Therefore although some had reported 25 bps increments between risk levels, this treatment may seem too simplistic, reflective of the relatively 'laid-back' sentiment of the investors at the time. While it is acknowledged that the role of the valuer is to interpret the market and estimate the likely exchange price, it is very clear from these comments that yield analysis, rather than yield construction, is the primary method of determining the initial yield (see section 2.6).

Various comments were made about the individual sectors. For example, the industrial sector in London was described as a market incorporating a number of distinct sub-markets, with numerous factors affecting them. Prices for industrial land in East London were incredibly high due to demand levels following the city's successful Olympic bid, also at the same time industrial values were heavily underpinned by a strong residential market and many buildings were purchased with a potential change of use to residential in mind. Thus where there is development potential, including a change of use, the covenant strength of the existing occupier may not be viewed as important.

By September 2008 a significant change had taken place. It was argued that the office sector in the City and Docklands was now being treated differently as the availability of finance had decreased and its cost increased. It was also stated that investors in the City have moved towards assessing property on the basis of more traditional and tangible 'property' factors rather than on the basis of the availability of cheap finance which had been the case during 2006–7 and which led the FSA to describe this period as one of 'irrational exuberance'. This reassessment was reinforced by the poor forecasts for the rental market over the course of 2009–10, hence impacting those properties with short income streams. Within the industrial sector, any hope value for underlying residential value had disappeared and the holdings with income streams of less than five years were now viewed as a liability, rather than a re-letting opportunity. Any property with less than 10 years term certain was described as virtually un-fundable with finance difficult to secure for any investment situation. Moreover, valuers commented that in some areas outwith London, the retail, warehouse and industrial sectors had witnessed no significant transactions and thus with no evidence, it was difficult to comment in detail on the current influence of covenant strength on pricing.

5.3 Ranking of cash flow risk

The valuers were then asked to rank the risks of cash flows relevant to the sector and location, on a scale of one to five in order of importance, with one being the highest risk and five being the lowest risk factor, again at the two different time periods.

Table 5.5: shows the summary average mean of the combined results of the ranked cash flow risks by sector.

Table 5.5: Average ranking of cash flow risk

	Office		Retail		Industrial	
	2006	2008	2006	2008	2006	2008
Lease length risk	1.9	2.5	1.9	2.1	1.9	2.6
Tenant break option risk	2.3	3.1	2.4	3.0	2.0	3.5
Re-letting risk	3.6	3.4	3.4	4.3	3.5	3.9
Void risk	3.6	3.5	3.4	3.8	3.5	2.9
Covenant strength risk	3.5	2.5	4.0	1.9	4.1	2.1

5.0 THE VALUERS' PERSPECTIVE

The results of the cash flow risk rankings demonstrate that as expected, lease length risk was considered the most important risk factor for all sectors in 2006 with a highest mean risk score of 1.9. Covenant strength risk for retail and industrial in 2006 had the lowest risk scores of 4.0 and 4.1 respectively, showing that covenant strength had been considered least important in this ranking exercise at the height of the market in these sectors.

However, by 2008 there had been a significant turnaround in the ranking. In the office sector, covenant strength risk and lease length risk had equal highest risk mean scores of 2.5. In the retail and industrial sectors the rankings had reversed completely and that covenant strength risk (1.9 for retail and 2.1 for industrial) was considered the most important and now ranked higher than lease length risk (2.1 for retail and 2.6 for industrial).

In interpreting these results it must be remembered that the role of the valuer in a Red Book valuation is to estimate the likely sale price at a single point in time. In doing so, the valuer must evaluate the key drivers behind the valuation and these results clearly show that the weighting changes at certain points in time during the cycle. The valuers are not setting the pace but reacting to the market signals which may, or may not, be rational. Nevertheless how the valuers report these changes to their clients is obviously important and this is discussed in the next section.

Some valuers commented that it was difficult to rank the risks as at December 2006, as investors were not assessing property in terms of such risks, but more generally in terms of how cheaply they could borrow money against it–a naïve approach given that the cost of finance does not itself eliminate other risk factors. The valuers also commented that in the current climate there is now a marked shift or discount in value where there is a perceived risk. In 2006 there was little perceived risk, indeed a void was often an advantage, with the opportunity to relet quickly at market rent. By 2008, a vacant building, rent review or lease expiry was seen as a threat rather than an opportunity.

It was stressed that in the current market whether the asset was held freehold or leasehold was of increased significance, as was the level of gearing. It was also advised that tenant covenant strength would be a far more significant factor if the properties subject to this analysis were not judged to be prime, as it is anticipated that the tenant failure on secondary properties will be far greater.

5.4 The reporting of covenant strength risk to clients

It was reported by the valuers that D&B, Experian, ICC, Fame reports and tenant company information are all being used to assess the covenants. The valuers are required to interpret the market's likely perception of covenant strength and therefore their research can also comprise of a combination of the above mentioned reports along with day-to-day knowledge, press articles, critique of tenant's website material and annual accounts. However, because the credit agency reports are historic in nature and are partly based on accounts lodged with Companies House it is recognised that in the current market with the speed of changing company fortunes, this means that in order to get the most accurate picture more frequent and in-depth company searches will require to be undertaken. Where possible some valuers also track the tenant company's share price and other available performance indictors. Several valuers also advised of regular property inspections and discussions with representatives of a tenant company to get 'grass roots' feel of trading conditions and their performance. Generally it was said that for prime properties the occupiers would be of a size and financial standing that their financial capabilities could be more easily established.

5.0 THE VALUERS' PERSPECTIVE

The valuers were asked how covenant strength is reported to clients and if specific risk scores were given; this resulted in a range of responses. The purpose of the valuation was key to determining the level of detail supplied. For loan security reports a commentary on tenant's covenant strength would be provided including the results of any D&B, Experian, ICC checks. It was commented that valuers are not qualified to comment on a tenant's financial standing and therefore form their view on the credit agency reports which are generally agreed by clients as the market standard. They would also comment if there has been negative press within their reports, and may recommend specialist advice be sought where there were any concerns over a poor credit rating. For regular accounting valuations, communication with clients would tend to be more by way of discussion rather than formal written commentary as clients are unwilling to pay the fee for a full credit rating analysis for every tenant.

The level of detail communicated by the valuers varied between the returns from no scores being advised to general discussions with clients, to all available scores, indices and the valuer's qualitative opinion being included. It was also noted that the fortunes of the prime sector is often well publicised, but that the difficulties lie more in the secondary and tertiary end of the market, where company information may be more difficult to obtain.

During follow up interviews, valuers were asked whether some form of 'traffic light' system would be helpful to highlight the covenant strength risk to clients. This gained some level of approval, although a simple three light system might not be sufficiently finely tuned so creating boundary problems; therefore further disaggregation might be needed. Moreover, it was felt that if such a such a system was introduced it might also include a traffic light for each of the key drivers including, for example, obsolescence and lease length. This way of communicating risk is worthy of consideration by the RICS Valuation faculty, as such a system would benefit from guidance to ensure consistency in its approach.

Key messages:

- The calibration of covenant strength by the valuers reflected the changing market conditions, but while the suggested premium between risk scenarios was incremental, it was not uniform.
- The results were at odds with the market data supplied by IPD, with the valuers reporting more distinct changes in yield to that reflected in the year end valuations of standing investments. While it is acknowledged that our survey removed the 'noise' problem in the scenarios as the valuers were asked to concentrate only on the covenant strength and lease length impact, it would suggest that while, in principle, valuers recognise the different risk scenarios, in practice yield analysis rather than yield construction is the primary method of determining the initial yield. This tends to preclude the explicit calibration of covenant strength within the risk premium.
- The speed in change of a tenant's fortunes is likely to be more rapid and therefore more frequent checks and research will need to be undertaken.
- While default risk is always assessed, varying levels of detail on covenant strength risk is reported to clients depending on the purpose of the valuation.
- Consideration should be given by the RICS to the introduction of a 'traffic light' system to highlight the key risks to clients.

6.0 THE LENDERS' PERSPECTIVE

6.1 Introduction

A series of face-to-face interviews were held with eight investment and commercial/retail banks in May and June 2008 to analyse individual lending strategies, methods for pricing of loans and their treatment of covenant strength in the evaluation of loan deals. This information has been summarised and illustrates clearly the change in market practice that occurred over the period from mid-2007 to the end of 2008.

6.2 The property and lending market

Over the five year period to mid-2007, UK banks had been keen to lend to borrowers and investors in commercial property, whether for development or investment purposes. In fact, it is argued that some banks were over anxious to lend on property deals as they were considered to be good long term prospects and beneficial for increasing profits. Much of the growth in bank lending in the period 2003 to 2007 can be attributed to property. Moreover, it was argued by some of the banks that the commercial property market price spike experienced during this period, was on the back of 'cheap money' which was far too easy to obtain. However, since mid-2007, the lack of liquidity and changing market circumstance has radically changed banks lending practices.

At the end of 2007, 11% of total lending in the UK was attributed to property lending. This was higher than levels in the early 1970s, early 1990s and also of more recent times. For the immediate future, some commentators are highlighting similarities to the downturn of the mid 1970s.

6.3 The lenders, loan types and lending activity

There are a variety of lenders in the bank sector, but for simplicity we have identified two main types; 'securitised' lenders, who sell on loans through issuances of CMBSs (and other products) and 'balance sheet' lenders who keep the loans on their books.

Some lenders have chosen both types of lending dependant on the state of the market, while others have chosen one or the other in accordance with their lending strategies. For example, one lender advised they had currently moved to the balance sheet side of the market through senior, mezzanine or joint-venture debt and co-investment equity. Their primary exit for senior debt positions had been through securitisation or syndication, but as the securitisation market is not currently active, more focus was now being given to syndicated loans. Another lender indicated that, in the present market, they deal mainly in either syndicated[4] or club loans[5]. Some lenders indicated a move in the type of lending, with more mezzanine debt rather than senior debt lending taking place; an indicator of the lack of liquidity in the system.

6.4 The pre-credit crunch lending market

The interviews indicated that, prior to the 'credit crunch', bank lending had been buoyant in all forms of debt products. There had been a plentiful supply of 'cheap money' for borrowers and investors in the market, where perhaps less consideration had been given to criteria such as covenant strength and more concern over prospects for re-letting and lease length. In the period from 2004 until July 2007, there was rapid growth particularly in the securitised lending market, involving both commercial and residential property. In the year to July 2007, there had been an average monthly issuance of €6bn in European CMBS, but this had fallen to zero by September of that year (Standard & Poor's, 2007). It is believed that this downturn was not directly concerned with the quality of the CMBS packages or the property market as such, but more a reaction to the re-pricing of credit and lack of liquidity in the global capital markets.

[4] Syndicated loans: where a group of banks join together to provide large loans to borrowers, the lead bank would underwrite the loan and get other banks to join, based on their terms. The lead bank would keep a percentage of the loan and then sell or syndicate the remainder.

[5] Club loans: where a group of banks join together to provide large loans to borrowers. There is no difference in terms between banks, with each contributing the same amount. The loans are not underwritten.

6.5 The lending market in 2008

In mid-2008, all balance sheet lenders interviewed indicated that they were still open for business but that existing clients with whom they had a track record may be favoured, along with those who had higher levels of equity and were looking to borrow on less risky assets. They also advised that it is currently more difficult to get banks to write deals together, especially bigger deals (>£50m loans), due to a lack of trust between the banks on the back of current liquidity constraints.

In the securitised market, as mentioned above, the origination of CMBSs dried up during Q3 of 2007 and this has remained the case throughout 2008. It is anticipated that it may be late 2009 or 2010 before this situation is reversed and further issuance is available. Some of the securitised lenders are currently seeking to reduce exposure to the commercial property market by selling off loans or part-loans.

6.6 Refinancing

During the interviews, the lenders indicated that there may be problems with refinancing certain loans when they come up for renewal. Most bank loans are written over a five to seven year period. An appreciation of how much refinancing is required is highly relevant as lenders adopt a more rigorous approach to the pricing of covenant strength and as significantly less generous terms are now available, compared to those offered at the height of the market prior to mid 2007.

Research carried out by Maxted and Porter (2008) shows that 39% of senior debt is due for repayment over the three year period (2008 to 2010). This should be of concern as equivalent yields are higher in 2009 than they were in 2003. Moreover short-term loans taken out in 2006 to 2007 may well now be in technical breach of their LTV covenant. Less CMBSs will be up for renewal with only 14% of CMBS loan maturities due for refinancing over the three year period 2008 to 2010, although there maybe default issues surrounding loan to value and debt service coverage ratio covenants.

6.7 Assessment of loans

The following part of the report looks at the different lending criteria which are used when considering loans to be retained on the balance sheet compared with loans which are to be securitized. There are various factors which are considered by the lenders and these are shown in Figure 6.1.

Figure 6.1: Factors in assessment of loans

6.8 Lending criteria: balance sheet loans

Lenders evaluate the loan risk against a basket of criteria, with each application treated strictly on its merits. While there was no consensus on the weighting of particular criteria, the key points which emerged were the characteristics and location of the particular property, the covenant strength of the tenant(s), the cash flow of the scheme, the lease length, the level of return, whether or not the applicant was an existing client and whether it was a recourse or non-recourse loan. Although the covenant strength of both the borrower and the tenant is an important influencing factor, it was admitted that at the height of the market the rigour of lending criteria, including covenant strength, was relaxed.

Much of the assessment of the financial strength of the relevant parties is done in-house. Less emphasis was placed on the views of the rating agencies compared with the securitised lenders.

One lender advised that when looking at covenant strength they would consider firstly the borrower then the cash flow. When assessing the cash flow they looked at the probability of default over 12 months and also over the length of lease. Their model would examine the tenants' balance sheets, levels of interest and gearing and then run a Monte Carlo simulation model to estimate the probability of default. As this is a rational approach, question marks must surround the inputs to the model given the amount of inappropriate lending that is now being reported. Even if it is a well designed risk scoring model, the speculation must be that the inputs to the model did not properly reflect the possible range of outcomes and misread the stage of the cycle. In considering the risk of default over the length of the lease, consideration should have been given to the likely market conditions throughout the lease (and loan term). If average lease length is 9.8 years (see section 7.6) and property cycles follow a cycle of 7.8 years (see section 2.3) a downturn should have been factored in.

In multi-tenanted investments it was stressed that it is important for borrowers to have a certain percentage of investment grade tenants. For example, given a multi-tenanted property with, say, 10 tenants, there are too many variables to determine a set way of pricing the loan, given the possible range of use and differences in credit ratings, lease terms and rent reviews. In this scenario, five year cash flow models are analysed to determine the appropriate amount of leverage and margin required.

In the case of recourse loans the covenant strength of the borrower is important while with non-recourse loans the covenant strength of the occupier is the key risk to be evaluated and priced.

One lender advised that quarterly income cover tests were carried out, which may be forward or backward looking. Another lender explained that when considering a loan for say, a shopping centre, they would meet with the key tenants to discuss their future plans and look at the aspirations of tenants coming into area and the type of space taken.

Where a lender is considering a deal at portfolio level, they have to take a view on quality versus spread, and may accept a lower covenant strength rating or shorter lease length, if the overall portfolio risk is acceptable.

The rating agencies are used to provide ratings on credit-worthiness and any expected defaults of companies, tenants, borrowers and in the case of capital markets, information relevant to the pricing of securities. They use a variety of data to achieve this including, for example, annual reports, prospectuses, market and economic data, and information from sources such as banks and regulators. Agencies such as Fitch, Moody's, S&P, Experian and D&B are used to provide assessments on private and public companies and government bodies. Some lenders have their own shadow ratings departments for internal source of ratings, mainly for tenants who are not rated, but may also use the agencies to supplement this information.

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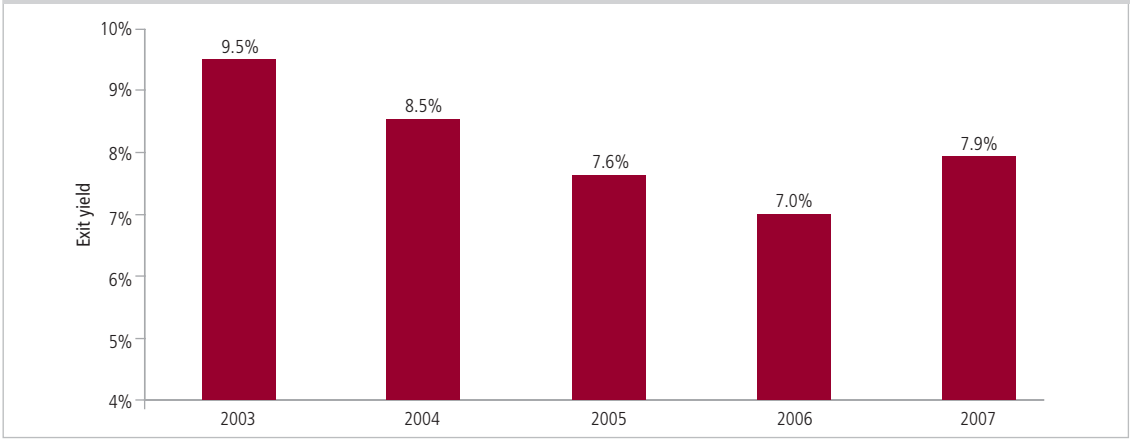
It was commented that in the context of assessing the tenant covenant in present day terms, the agency ratings performed a satisfactory role, but they were less capable of taking into account the operational business risks of covenants over time.

It is apparent that, at the height of the market, little differentiation had been made in the pricing of loans between the primary and secondary market. The various conditions of the lease agreement affected the pricing. Lease length was considered important, as lenders were unlikely to lend beyond the end of the lease. By the same token, the time taken to relet was also emphasised.

Clearly where a property is ripe for redevelopment, the lender has to consider a loan period beyond the existing lease length. In such a scenario, the level of borrowing will be considered against both the existing use value and against the vacant possession value. Lenders calculate their exit yield at the end of the loan period. In this context the 'exit' yield does not refer to the market capitalisation rate at the end of the loan, but is calculated as the rent divided by the debt outstanding at the end of the loan (hereafter referred to as the loan exit yield). The loan exit yields for prime office investments are still short of 2003 levels but are higher than 2005–06 (Figure 6.2).

Figure 6.2: Average loan exit yield for a five year loan secured on a prime office investment



Source: Maxted and Porter (2008)

When considering exit yields, the lender requires a current market valuation and uses this data for ERV, void period modeling, and considering the effective end date value.

Lenders are aware of the need to have diversified loan books that are not too exposed to certain tenants or sectors. One lender advised that in a real estate business model where risks and returns are modelled quantitatively the lender can decide in advance what their active strategy to lending to certain property sectors may be, and they may choose to decline loans to sectors where they believe the risks to be too high. Concerns were expressed in the current economic climate about certain tenant types - for example those involved in the housing market, motor and DIY - and in such cases the lenders require higher interest cover ratios (1.35-1.40) or lower loan to value ratios.

6.9 Lending criteria: securitised loans

In the securitised lending market, the key determinant is the cash flow generated from the property, with attention focused on the risk assessment of the tenant(s) and the resulting cash flow, rather than the borrower.

6.0 THE LENDERS' PERSPECTIVE

The expected rating of the securitised vehicle is the key determining factor in the pricing of the loan. Triple-A ratings have been seen as vital to the issuance of structured debt. Past experience will enable a lender to gauge the likely rating of the securitised vehicle particularly if the tenant is investment grade. Nevertheless, the underwriting team will also look at macro factors such as the tenant's sector, longer term outlooks and exposure levels to the tenant itself and its sector and or competitors.

In the case of a non-rated tenant, the lender would be expected to drill into the financial background, examining issues relating to affordability and the ability of the tenant to pay rental commitments over the medium to long term. It was noted that some good tenants are not rated as they do not have public debt.

Rating agencies are used to help price the credit risk of fixed income securities. They provide key market indicators of the riskiness of the underlying loan book which have a significant bearing on the issue price. There could be several agencies used in the rating of a securitised product. The agencies create bond ratings for each of the bond tranches when the securitised deal is closed, and then monitor the performance on a regular basis, reworking any defaults or loss events affecting the loans within the trust and alter the rating accordingly.

However, the performance of credit rating agencies has come in for some heavy criticism particularly from the FSA. The FSA Risk Outlook Report (2008) commented that the speed and magnitude of ratings reductions in 2007 implies "widespread failure across the main credit ratings agencies in providing accurate ratings for structured securities backed by US subprime mortgages. Ratings have failed to take account of loosening underwriting standards…" (p22). Moreover not only did the accuracy of the ratings come into question but also the way that they were being interpreted. The FSA report suggested that institutional investors wrongly assumed that a triple-A rating meant not only an insignificant probability of default, but also deep market liquidity and low price volatility which was not the case.

Conflicts of interest exist as the rating agencies were employed as consultants to advise on the structuring of the issues (Lizeri, 2009). Moreover, it is the originator of the securitised product that pays for the rating. This introduces a degree of tension between the two parties. The bank wants the highest rating possible in order to make the bonds more attractive to investors and achieve a higher price, while the rating agencies must maintain their reputation for impartiality and assign a fair credit rating. The fact that many of the mortgage backed securities in the US did receive AAA ratings, even those that were backed by the riskiest home loans, brings the system into disrepute.

If the tenant is not investment grade, then the property fundamentals become major factors in deciding whether to proceed with a loan and the terms offered to a borrower. The key issues surround how quickly the property would re-let if the tenant defaulted, what the terms of a new lease would be, particularly given the current relationship between the passing rent and the estimated rental value, likely void costs (eg empty rates) and what improvements to the property would be needed, or incentives offered, in order to attract a new tenant.

The loan exit yields in CMBSs are key drivers and enable the deal to be sized–one of the major risk factors. While the majority of loans are for five to seven years, lenders examine the cash flow for the five years beyond the end of the loan, and/or to expiry of the lease. Loan exit yields are calculated at all these points. At the end of the lease the amount of debt will be compared with the vacant possession value. Lenders 'stress' the interest rate and margin beyond the loan term or hedging period. Loan exit yields in mid-2008 were c8+% for offices, c9+% for industrials.

In relation to property market sectors, securitised lenders appear willing to consider all commercial sectors, although one lender advised they did little lending in the retail sector as the acquisition yields were too low, therefore making it difficult to service higher leveraged loans from the internal cash flow of the investment. Another lender commented that some securitised products contained a diverse mixture of loans, including leisure which was at the higher risk end of the market, requiring some careful balancing of the loans which were packaged together to ensure a reasonable spread of risk.

6.10 The pricing of balance sheet loans

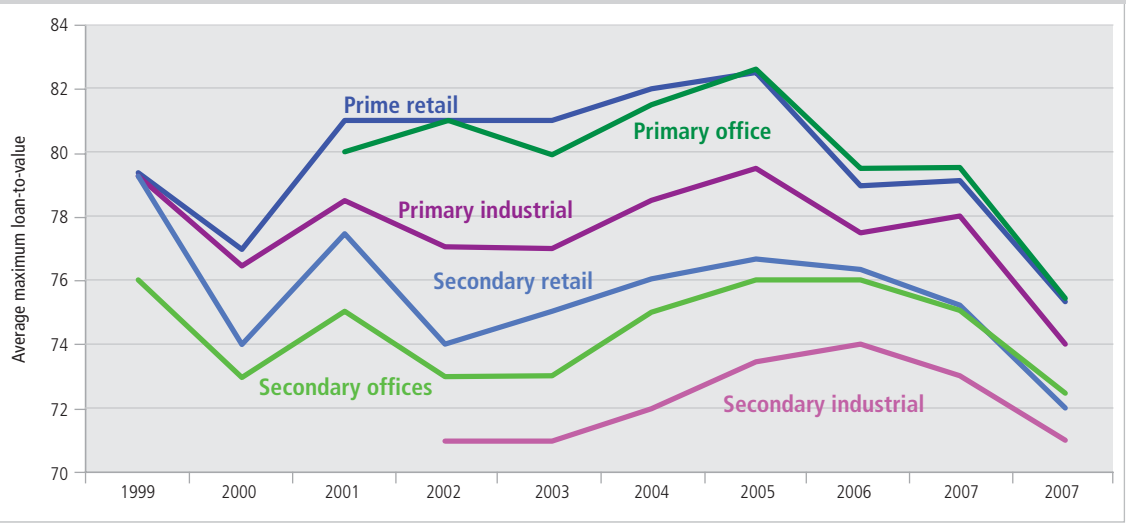
Different pricing margins are applied by the lenders depending on whether the loan is to be kept on balance sheet or securitized. For example, prior to mid-2007, a loan application to purchase a large shopping centre would have been priced at 35 bps over Libor on a securitised basis, or 85 bps over Libor if held on balance sheet by the bank. While a significant differential, bank loans do offer the borrower more flexibility if changes to the original loan agreement are required, whereas with a securitised deal such flexibility is not normally possible. However, both types of loan have seen significant changes in their pricing as a result of the current liquidity crisis.

As mentioned previously that for balance sheet loans there was no consensus on the weighting of particular criteria but there was agreement on the order of importance. In descending order:

1. The relationship with borrower, the covenant strength of the borrower and level of bank recourse
2. Cash flow and or covenant strength of tenant and or lease terms
3. LTV ratios

LTVs have fluctuated over the past eight year period (Figure 6.3). The lower levels of prime LTVs in 2006 were a reaction to the reduced income cover resulting from the downward shift in yields.

Figure 6.3: Average maximum loan-to-value ratio by sector



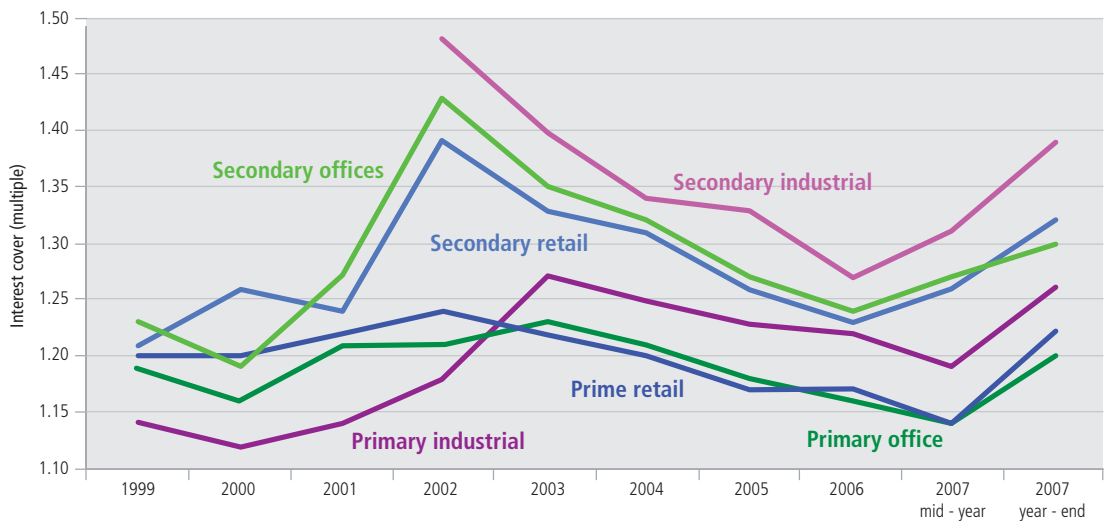
Source: Maxted and Porter (2008)

6.0 THE LENDERS' PERSPECTIVE

Interestingly, one lender commented that two years ago they were lending interest only loans with LTV at 75%, but that now this was more likely to be a LTV of 70% or less, with a requirement for the loan to be part amortised over five years for example, so as to reduce the LTV to 68% by the term end. It was stressed by another lender that over 80% loan to value ratio is equivalent to taking equity in the property–a position they were not willing to take in the current market.

The interest cover requirement depends largely on the cash profile of the borrower. Prior to mid-2007, this would have been a multiple of 1.15, but is now likely that the cover required is to be in the range 1.25 to 1.45. Income cover is now returning to the previous levels of 2003/2004 (Figure 6.4).

Figure 6.4: Interest cover (multiple) by sector



Source: Maxted and Porter (2008)

Most loan agreements contain LTV covenants to protect the lender in the event of a downturn in the market. However, recent events have seen significant reductions in valuations resulting in breaches of these covenants, but this has not necessarily led lenders to call in the loans provided that interest payments are being met. The interviews indicated that most lenders did not wish to cause any unnecessary penalties or charges through breaches to loans, where cash flows remained healthy.

The cost of a loan is normally quoted as a margin over either base rate or Libor. However, as the liquidity crisis has deepened and the differential between base rate and Libor has widened, new loans are now quoted as a price over Libor.

Since mid-2007 there has been a significant repricing of loans which is illustrated in Tables 6.1 and 6.2.

Table 6.1: Pricing of senior debt, with 10 to 15 year lease profile and good covenant:

	Prior to mid-2007	2008
LTV ratio	>80%	<75%
Margin (in bps)	<100	>140-170
Interest cover	1.15	1.35-1.45
Fees (in bps)	35	100

Table 6.2: Pricing of mezzanine debt, with 10 to 15 year lease profile and good covenant

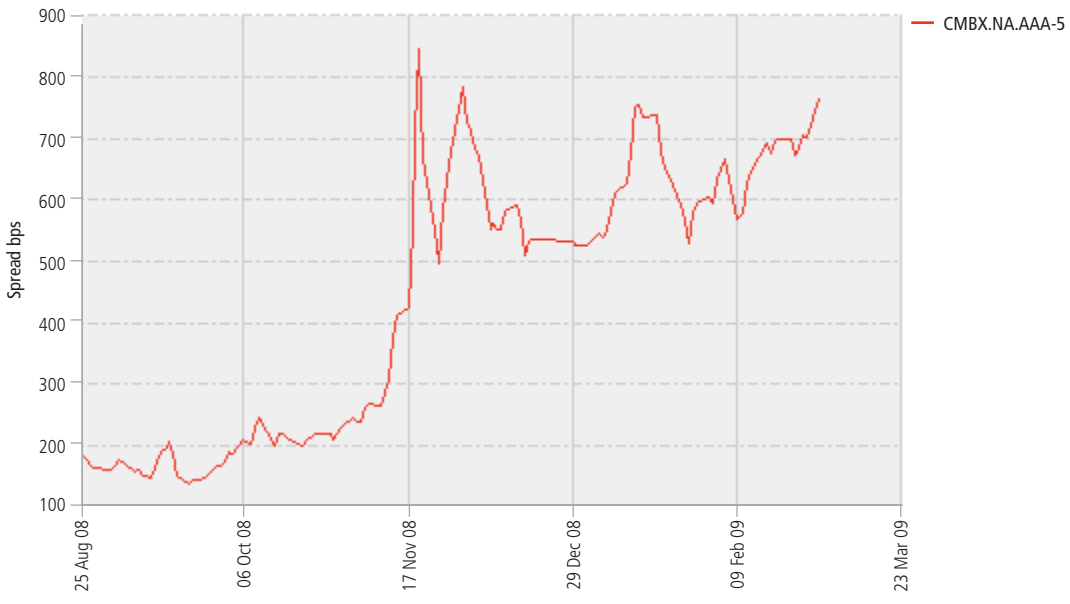
	Prior to mid-2007	2008
LTV ratio	Bps	Bps
65–75%	300	400
80–90%	400	500
90–100%	450	550

6.11 The pricing of securitised loans

In the pricing of CMBS, it was stressed that it was important to consider other relevant market prices at any given time, for example the pricing of conventional bonds, ABS & RMBS markets and establish what margins are being achieved and then consider an appropriate risk margin for the CMBS. The lenders also stressed the need for high velocity of capital – the speed with which money is received, lent out and then packaged into a securitised product.

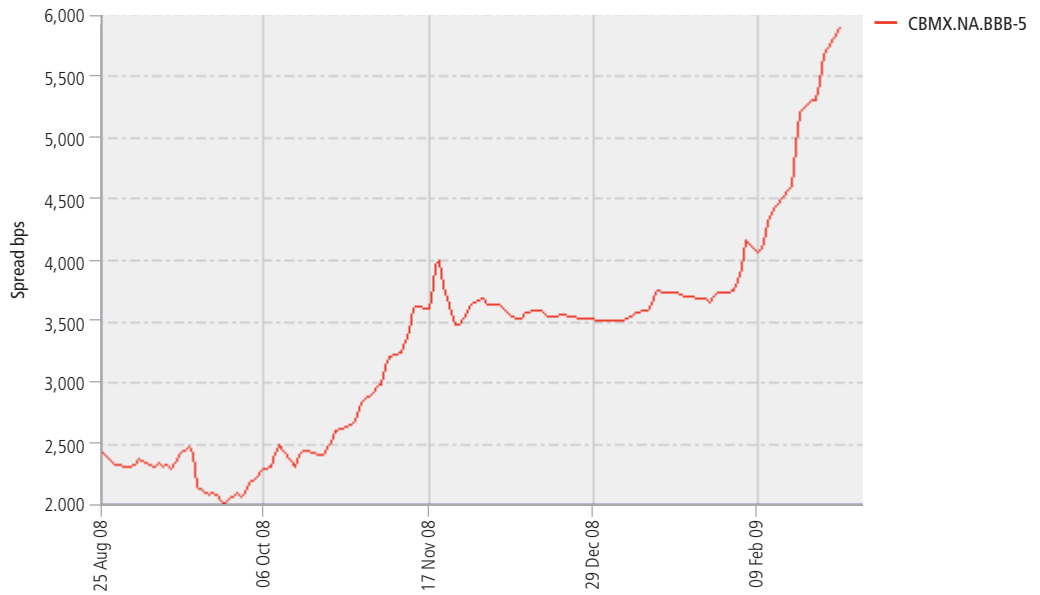
The second half of 2007 saw a dramatic repricing of securitised transactions. This is best illustrated by the effect on the CMBS Indices (CMBX) which are illustrated in the Figure 6.5 and 6.6 from MarkIT.

Figure 6.5: AAA CMBS Index



Source: MarkIT

Figure 6.6: BBB CMBS Index



Source: MarkIT

One securitised lender advised that LTV ratios 18 months ago had been 85–90% for B Notes, however if they were lending in the mid-2008 market they would more likely be 75–80%. Another lender advised that the interest cover had been 1.15 in 2007 but would now be more in the region of 1.25–1.45 depending on the cash flow profile of the borrowers.

In relation to default rates most CMBS conduit loans do not have loan to value covenants. Where they do exist it was noted that many lenders may choose to disregard these as they do not want to spoil their relationship with the client, or 'stress' the loan, when the debt is being serviced.

6.12 The Impact of Basle II

Basle II is an agreement between the banking authorities of the major developed countries (OECD countries), which has been enshrined in the EU Capital Requirements Directive and is currently being introduced to the UK financial system. It is intended that Basle II will "align required minimum capital more closely with lenders' real risk profiles" (CML, 2009).

Some respondents indicated that the impact of Basle II had yet to make a significant impact on their day to day lending practice. It was considered to be a back-room activity, which had not yet been fully developed and implemented. Another commented that it would be difficult to assess the impact of Basle II at this early stage, as since its introduction, the market had been very volatile.

One of the investment lenders indicated that Basle II will have a bigger impact than some had imagined. For lenders who underwrite mezzanine or equity funding, certain capital ratios will have to be maintained. It will require higher pricing to maintain return but this is subjective and maybe problematic due to the inconsistency of

approach across different lending teams and standard pricing models which have not yet been agreed. Under Basle II past performance on default situations will be considered and relatively new lenders may be penalised as they may not yet have a long enough history. For some lenders it appears that this new directive is not being used very much at present, as more focus is being given to cash flow.

Another lender indicated that the effect of Basle II has been to make processes more focused, give consistency and make activities fit together more accurately. The structure of deal and covenant are all tracked using the IRB perspective. Internal ratings scale can be used to rate loans ie ranging from rate 1.0 to 6.3. The lenders can create their own IRB modelling for their own business, but this is under a regulatory framework where the FSA allow banks to run themselves but will test self regulation at regular intervals.

6.13 The role of the Financial Services Authority

In considering how lenders have evaluated covenant strength, comment must be made on the performance of the bank regulator, the FSA, which has been criticised for being more concerned with process rather than economic sense. The Financial Services and Markets Act (2000) sets out four main statutory objectives of the FSA:

i) to maintain confidence in the UK financial system

ii) to promote public understanding of the financial system

iii) to secure the appropriate degree of protection for consumers and

iv) to help reduce the scope for financial crime

This leads the FSA to pursue the key objective of promoting efficient, orderly and fair markets. It is recognised that this regulatory role is at the macro level and that the detailed treatment and pricing of individual loan deals is not the function of the FSA. However, the FSA have presided over an extremely volatile period when the market has been far from orderly, and their performance, structure and level of powers have been called into question.

In the foreword to the FSA Business Plan 2009/10, the Chairman Lord Turner accepted that the regulatory system in the UK, and globally, must adapt and change. With regard to the collapse of Northern Rock "the FSA identified and publicly admitted weakness in its own supervisory approach" (p5). Lord Turner believes that there was a failure to conduct and act on macro-prudential analysis and interestingly also a wide ranging intellectual failure. His comments are worth quoting in full:

> *"It was believed and said by many influential authorities that the development of the model of securitised credit, structured credit and credit derivatives, extensively traded between banks and near-banks, had diversified the holding of credit risk and contributed to a "Great Moderation" in financial and economic risk. This turned out to be diametrically wrong."* (Lord Turner, FSA 2009a, p5)

Lord Turner goes on to suggest that the FSA need to improve their ability to conduct "macro-prudential analysis identifying… the key developments in overall systematic risk which need to be reflected in our supervision of individual firms" (ibid, p6).

The Turner Review: a regulatory response to the global banking crisis, was published by the FSA in March 2009 (FSA, 2009b). In putting forward recommendations to create a stable and effective banking system, recommendations 3 and 14 are particularly relevant to the pricing of default risk:

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"3: Regulators should take immediate action to ensure that the implementation of the current Basle II capital regime does not create unnecessary procyclicality; this can be achieved by using 'through the cycle' rather than 'point in time' measures of probabilities of default.

14: Credit rating agencies should be subject to registration and supervision to ensure good governance and management of conflicts of interest and to ensure that credit ratings are only applied to securities for which a consistent rating is possible." (FSA, 2009b, p7–8)

Unfortunately despite repeated requests for an interview, the FSA were unable to meet with the research team.

Key messages:

- Prior to mid-2007 the property market had been overheating partly due to the availability of cheap debt finance and the pursuit of a position in the market by the yield chasing investor. During the growth stage of the cycle, lenders confirmed that while covenant strength was a relevant criterion in lending decisions it was not the dominant factor. Cash flow, lease length and re-letting prospects were more important considerations.
- At the height of the market cycle, lending criteria were relaxed and questions must be asked how this was allowed to happen on such a grand scale. The performance of the FSA in "promoting efficient, orderly and fair markets" has been called into question.
- Doubts surround the calibration of the bank's risk scoring models. Speculation must be that the inputs to the model did not properly reflect the possible range of outcomes and misread the stage of the cycle. In considering the risk of default over the length of the lease, consideration should have been given to the likely market conditions throughout the lease and the loan term.
- The performance of credit rating agencies–key to the pricing of securitised products–has come in for some heavy criticism by the FSA, with default risk being significantly mispriced.
- In loan pricing important differentials were made between sectors recognising the different volatilities and characteristics.
- Heightened awareness and more accurate measurement of risk are also being driven by the increasing regulatory framework in particular the implementation of Basle II. Lending practices appear to have become more focused and consistent across banks with more rigorous quantitative approaches being used.

7.0 THE INVESTORS' PERSPECTIVE

7.1 Introduction

Nine UK institutional investors were interviewed in August and September 2008, each explaining their own investment strategies, attitudes towards risk, changes in market conditions and the treatment of covenant strength in their investment processes. Those interviewed managed a variety of funds some of which included commercial property assets. These ranged from balanced funds including annuities, distribution bonds, fund of funds, insurance funds, life funds, managed funds, pension funds, pooled funds, secured property income funds (SPIFS), unit trusts and with profits life funds to institutional funds, specialist property funds and overseas property funds.

It is important to reiterate the background against which the interviews were conducted. The previous 12 months had seen a significant price correction in all the capital markets. At December 2008, UK equities recorded a year-on-year performance of -29.9% compared to returns from property of -22.1% and gilts +15.0%. It was commented that during August 2008, transaction prices were often around 10–20% lower than the reported valuation, with an estimated peak to trough pricing correction of 35% and with the floor on capital values expected to be reached by mid 2009.

7.2 Fund objectives

Investment strategy depends on the fund objectives. For example, steady long-term income returns are required for life funds where income is the key driver, whereas in opportunistic type funds there is more emphasis on capital growth by adding value and increasing income. In the opportunistic funds there is a higher level of gearing, more trading of assets and the higher risk and volatility associated with higher returns is considered acceptable. The interviewees commented that their key investment objectives were to maximise returns for a given level of risk and to out perform relative benchmarks such as the IPD indices.

In recent years, overall UK institutional investment in property has, at most, been 10–15% of the overall portfolio value, with the balance comprising bonds, cash and equities; although some of the fixed income type funds may have included a higher percentage of property assets.

The interviewees based their investment decision on property fundamentals including: sector, location, tenant quality, lease length, passing rent, market rent, expected growth, reletting prospects, likely void period, and the relationship between market value versus underlying investment worth. In addition, some placed particular weight on the value associated with the existing lease arrangement, comparing current market value with vacant possession value.

A combination of market and internal house views, risk adjusted discount rates (RADR), hurdle rates, IRRs and cash flows are used when assessing assets. The fund type, as mentioned above, will determine whether total returns or capital growth is the investment driver, and will therefore determine the type of assets to include within the fund.

The impact of tenant covenant is, or should be, examined from the initial assessment through to the effect of default on cash flow, void periods, and the costs associated with reletting and tenant inducements.

7.3 The assessment of covenant strength risk

Most of the investors carry out an in-house analysis on the credit worthiness of tenants by for example reviewing company accounts and other key indicators, or using credit agencies such as Experian or D&B to carry out this work. Some of the companies have their own monitoring and tenant scoring methods, which are updated regularly. This assessment process becomes more difficult to calibrate for certain tenants, such as private individuals, who do not have readily available public information and specialists may then be asked to carry out a detailed investigation.

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The whole process depends on whether it is an existing investment, or a new acquisition. If the latter then more in-depth analysis is required. It is also dependant on tenant concentration. If it is single-let then more analysis may be required compared to a multi-let where there are many tenants and the risk is diversified to a certain extent. It is part of the investment process to have a view on covenant strength.

Reports are generated by the credit agencies quarterly or annually, and this information is then given to the investors who then feed the data through to their cash flow models. Some investors had an early warning system set up with the credit rating agencies and were notified immediately if a company's credit score was downgraded. It was suggested that the best data to use rather than credit scoring information, was internal information on rental payments being made and advice from management agents as they could highlight any potential problems. There was a general criticism that the rating agencies are looking at past information, and are not sufficiently up to date to be able to warn when businesses are having problems and may be more likely to default.

Some investors argued that the redemption yield of corporate bonds may be a better indicator of default risk, rather than the rating of bonds themselves. For example, a company which shows a measurable change and loss of market sentiment would result in a change in pricing of their corporate bonds, and this could be used as the indicator of default risk by the investors. When the economy is very good, a company that is strong financially will need to offer only a very small yield spread over gilts. On the other hand, if an issuer has yield problems, the default spread over gilts will widen.

It was reported that, at the portfolio level, it may be acceptable to have some weaker tenants within the tenant mix. Several investors favoured multi-let assets which enabled default risk to be spread across a range of tenants and business areas.

Overall covenant strength assessment involved a mixture of quantitative and qualitative approaches, a finding consistent with earlier research by the IPF (IPF, 2007b). While in most cases the analysis was in depth, not all relied on quantitative modelling. Frequent reference was made to the use of the IPD Rental Information Service (IRIS) system which provides information to the investors on the following aspects:

- Income dependency by property type, industry and company
- Credit covenant strength of their tenants
- The future income expiry profile
- Potential for future income growth and income at risk

7.4 Default

Default results in actual loss of income, an uncertain void period, costs associated with reletting and the prospect of having to offer tenant inducements. Clearly, any tenant defaults are problematic and have a direct impact on returns but this is particularly true for annuity type funds which are cash flow driven. It was also recognised that the risk of default varies at different stages of the cycle.

Companies with weaker covenants are required to set up guarantees or to give rental deposits, but it was commented that it can often be those tenants who at the outset were less likely to default, who go into administration and end up losing the funds larger sums of money.

When asked how much of a difference a 100 bps change in default rate would make to the level of total return, surprisingly none of the investors were able to comment on the absolute financial impact. It might have been expected that default modeling would have fed through to total return estimates.

7.5 Levels of loss

The investors all tracked their arrears on an individual tenant level but rarely at a sector or regional level. One commented that they had not seen much difference in default levels as at August 2008, and this was still low at 1–2% with the exception of some expected seasonal issues, but several commented that it is expected that default trends will increase in 2009. On average it was reported that within 12 weeks of the quarterly rental due date, between 98 and 99% of all rents are received. Any non-payments would give cause for concern. Comments seemed to suggest that in today's market, a 2–3% default would be considered acceptable, but some of the income loss may be recovered at a later date through administration. It was stressed by many of the interviewees, that every effort is made to overcome tenant issues as they arise and that it was rarely in the landlord's interest for the property to become vacant unexpectedly.

There have been renewed calls by the British Retail Consortium and most notably by Sir Philip Green of Arcadia for rent to be paid monthly rather than quarterly in advance. In September 2008, Hermes agreed to end the requirement to pay rent quarterly in advance for all its 2,000 retail, warehouse and office tenants. Interestingly it was considered by the investors that this would not significantly help cash flow problems for the tenant, but was more of an indicator to the landlord of the financial health of the tenant.

7.6 Lease length, break options, void periods and tenant incentives

The interviewees unanimously agreed it is the combination of covenant strength with lease length which enables cash flow risk to be appropriately priced. It was advised that when the market is performing well there is less of a requirement for this to be analysed, but during downturns in the market these factors become increasingly more important. This approach seems somewhat shortsighted and is clear evidence of pricing at a point in the cycle rather than taking the longer view and pricing through the cycle.

It was argued that to be of value, a long lease needs a strong covenant to back it, whereas shorter leases tied to a prime property asset are usually easier to re-let, and therefore there is less concern about the quality of the tenant.

In the previous bull market, short leases were considered an advantage, as landlords could regularly benefit from being able to re-let assets at full market rent, without any prolonged void period. However, in recessionary times it is expected more break options will be exercised, partly to allow tenants to exit the property and partly as a way of negotiating rental reductions in the face of upward only rent reviews. There is a danger that in a weak market a vacancy will result in long void periods and with empty rate payments also now being levied, additional costs will be incurred.

It was advised that break options were being exercised, and tended to be considered on an asset by asset basis with no specific guidelines being given to fund managers. It is also advised that cautious assumptions are made when referring to break options and it is expected that there will be more breaks in the future. The Strutt & Parker IPD Lease Events Review (2008) stated that the propensity to break increased from 37% in 2006 to 43% in 2007 when weighted by rental value. Also in 2007 when weighted by ERV, the propensity to break in over-rented units increased to 41% and in reversionary or rack-rented units to 44%.

The interviews confirmed that in general, there has been a shortening of lease lengths across the industry in 2008 with fewer leases of over 10 years. The BPF IPD Annual Lease Review (2007) reports that the average lease length of all new leases weighted by rent fell to 9.8 years in 2006–07, compared with 14.3 years in 1999 (Figure 7.1). The BPF also reported that 67% of leases granted in 2006–07 were for five years or less with 3% or less being granted for more than 15 years.

Figure 7.1: Average lease length – weighted by rent passing

Year	Average lease length
1999	14.3
2000	14.0
2001	12.9
2002	12.3
2003	11.7
2004	12.4
2005	11.0
2006	9.8

(Source: BPF)

The interviewees indicated that in the current market the length of void periods was increasing from the previous norm of 12 months to 18 to 36 months. This has a major impact on cashflow and again emphasises the importance of careful tenant selection to avoid unnecessary interruption to income and reduce the risk associated with the investment. Void periods are uncertain and affect sectors and locations differentially.

New leases whether through default or not, come at a cost as incentives are often required. It was advised that retailers are currently looking for longer rent free periods and shorter leases. In such a market the risk of default is higher, lease renewal more frequent, and allowances for voids more imminent.

It was also commented that the market has not fully priced the change in lease length which has occurred over the last 20 years. In 1988 the standard lease profile was for 25 years with five yearly reviews which by 2008 had changed to 10 year leases with five yearly reviews coupled with the likelihood of a tenant break after five years–a sizeable shift in the risk from tenant to landlord. It was suggested that it may be appropriate to adjust by more than 100 bps for a short lease.

7.7 Prime vs secondary assets and sector differences

Fundamental property characteristics were considered of great importance in securing future cash flow from the investment. If the asset was prime in all respects, then tenant default would not be a major concern as the property could be re-let within a short time period. However, if the asset was secondary and in a less popular location, then problems could occur if the tenant defaulted and the property turned vacant. This had been less of a concern in the previous buoyant market.

For those funds seeking a well diversified, balanced portfolio, sector spread is also important. It was recognised that some sectors are more susceptible than others to the slowing down of the economy. An understanding of the impact of the real economy on the occupier market is thus essential. Careful analysis is required to understand which sectors perform well in a buoyant economy and which are most affected by a downturn. One investor advised that they use different models for each of the sectors, and IRIS can be used for this type of analysis.

7.0 THE INVESTORS' PERSPECTIVE

It was advised that the guidelines of the individual funds may include conditions on tenant types, groups or industries and these would vary between individual funds. It was stated that the investors would not expect to have more than 5% of the rent roll dedicated to a certain tenant, although there may be certain exceptions to this for example, some high street tenants. Also, at a portfolio level there may be an aversion to certain tenant types or groups detailed within the fund guidelines. It was advised that some investors used IPD tenant analysis as a benchmark to review tenant concentrations, and the importance of using as many different tools as possible to ensure diversity among the large number of tenants within the funds was conveyed.

7.8 Pricing of the risk

In choosing the appropriate discount rate, a long term risk-free rate plus risk premium is calculated. The risk premium makes allowance for factors such as covenant strength, the building, location, liquidity, and obsolescence. This type of analysis would be carried out on an individual asset basis and also at a portfolio level, to determine whether to buy, sell or hold the assets. It was commented on several occasions that probably the risk was not being adequately priced in the previous buoyant property market. Given that the commercial market has seen a 35% decline in value over the period 2007 to 2008 this seems a welcome admission of fact, but begs the question why analysts were underpricing the risk.

Some of the investors use hurdle rates which are compared to the expected returns from the asset. Where the asset does not meet the hurdle rate it will not be purchased, or in the case of an existing asset could be flagged for disposal or sale. These rates tend to be generated with a five year view, and can be reviewed annually or as may be required, and it is assumed that the investment is sold after the five year period.

Risk adjustments to the hurdle rates are considered on a property by property basis, this requires it to be done at the portfolio level for the funds and a system such as IRIS can perform this. From a portfolio level there was some concern that aggregated credit scores may not highlight any potential risk of particular tenants, whereas other investors advised that this was not such a concern due to the risk of certain tenants being diluted within the portfolio. However, simply increasing the number of tenants in a portfolio does not necessarily reduce the risk of default if there is high correlation between the tenants.

The institutions have guidelines which are followed in the investment operations of all fund types. Most of the interviews revealed that there were no specific guidelines relating to the treatment of covenant strength. It was commented that some of the life funds do have IMA constraints relating to gearing, voids and covenant strength, but very few mandates detail the parameters of risk which should be applied to covenant strength. In some instances where any mandates have been specific about tenant risk then the approach may be different. It was mentioned that other property risk factors are advised to fund managers, and feasibly this could also incorporate how covenant risk ought to be treated in the future, given that this is likely to be more of a concern in the current market.

Up until August 2007, covenant strength attracted a lower risk premium while the market was performing well. Given the current change in market conditions, it has been conveyed that more in depth analysis into covenant strength is required when any modeling is carried out in the future both at the asset and fund level. In the meantime the proverbial horse has bolted and one wonders whether any long term lessons will be learnt from this recession or whether at the next upturn in the market, the desire to secure a position will once again trump rigorous analysis.

7.0 THE INVESTORS' PERSPECTIVE

Many of the investors argued that it is not as simple as adding or removing x bps to the yield depending on tenant's credit scores (AAA to B type), due to all the other factors involved. It is the interaction of all the variables which was stressed–sector, quality of location, lease length, covenant strength, break options–which require to be factored into the pricing.

Fundamentally it is important for market participants to understand the link between the economic and property cycles. The academic literature informs us that the property cycle directly feeds off the economic cycle. Thus an appreciation of the stages of the economic cycle and how it feeds into the yield curve and rental growth is crucial, along with a clear understanding of the present, and likely, state of the market at the end of the investment and lending period. It was acknowledged that covenant strength attracted a lower risk premium while the market was performing well and that positions had been taken in the market which, with hindsight, had not been properly priced.

Property pricing should reflect the systematic risk inherent in the market but is clear from our research that the UK market in recent years was swept along by short-termism, and this myopic view then exaggerated the correction that followed. Moreover, more research and attention should be paid to the differing volatility in returns between the sectors and across geographical areas. Covenant strength is not priced in isolation, but rather requires to be evaluated in conjunction with the mix of sector and property specific characteristics.

In summary, covenant strength forms part of the systematic and specific risk component. In relation to the former, the stage in the economic and property cycle is the key factor while with regard to the latter it is the sector, lease length, tenant, location and obsolescence factors that are of most significance. Both systematic and specific risk need to be properly priced within the risk premium (see Section 2.6).

Key messages:

- Clear recognition by investors that covenant strength risk had not been appropriately priced during the upturn in the property cycle. Investors appear guilty of pricing at a point in the cycle rather than taking the longer view and pricing through the cycle.
- It is the combination of lease length and covenant strength which enables cash flow risk to be appropriately priced.
- Careful analysis is required to understand which sectors perform well in a buoyant economy and which are most affected by a downturn. There is clear evidence of mispricing of the systematic risk.
- The last 20 years has seen a significant reduction in lease length and the increasing prevalence of break options. This represents a significant shift of risk from tenant to landlord which may not have been appropriately acknowledged in market pricing.
- Covenant strength risk should be priced, not in isolation, but in conjunction with the mix of sector and property specific characteristics in order to reflect volatility in returns across the sectors and geographical areas.

8.0 CONCLUSIONS

The focus of this research has been to investigate the treatment of covenant strength by the three key property market participants; the valuer, lender and investor. At the outset of the research in March 2008, few could have forecast the level of turbulence that was to hit the financial markets in the autumn of 2008 and that by the end of the year the UK would officially be in recession. However, many had predicted that the UK commercial property market was overheating. The double digit returns of 2003 to 2006 told a story of capital value appreciation on the back of 'yield chasing' investors aided by cheap and available debt finance. In attempting to deconstruct the yield at this point in the cycle, either the risk premium was negligible or investors were adopting hugely optimistic rental growth prospects. The mispricing of systematic risk came abruptly to an end when investor sentiment turned and liquidity dried up. If cash flow risk had not been properly priced during the boom years, this position was swiftly reversed in 2008. The focus once again was on protecting income as the main driver of return as those involved recognised that covenant strength risk had been insufficiently weighted. What lessons can be learned from this episode?

First and fundamentally it is important for market participants to understand the link between the economic and property cycles. The academic literature informs us that the property cycle directly feeds off the economic cycle. Thus an appreciation of the stages of the economic cycle and how it feeds into the yield curve and rental growth is crucial, along with a clear understanding of the present, and likely, state of the market at the end of the investment and lending period. Property pricing should reflect the systematic risk inherent in the market but is clear from our research that the UK market in recent years was swept along by short-termism, and this myopic view then exaggerated the correction that followed. Moreover, close attention should be paid to the differing volatility in returns between the sectors and across geographical areas. This exposes the need to conduct thorough research on the sectors as well as the individual tenant's financial strength. For example, the research illustrated that a sector analysis on the probability of delinquency can act as an important early warning system on potential defaults.

The analysis of IPD data from 2003 to 2007 showed that it was only when covenant strength was combined with lease length that the impact on equivalent yields could be discerned. While in general the results support the rationale that higher risk covenants command higher yields, it was evident that in the early part of the analysis period the market added only a very small additional risk premium to reflect the differences in covenant strength. The risk of default was being largely ignored in a buoyant market. However, this was adjusted as the market entered the down phase of the property cycle, which was too late for many investors.

In attempting to quantify the risk premium to be applied to differing combinations of lease length and covenant strength, the valuers confirmed the narrowing of the risk premium at the height of the market in 2006, with the subsequent correction when the market was in full retreat in 2008. It was commented that at the height of the market, such was the appetite for commercial property, that normal valuation mechanics were effectively ignored in places. At all times valuers have a responsibility to provide clients with appropriate advice on the state of the market and this should also include commentary on covenant strength. It would appear that the reported level of detail on covenant strength varied considerably and the RICS might reflect on whether some uniform reporting of the covenant strength of the tenant, perhaps based on a 'traffic light' system, should form a compulsory part of all valuations.

From the lender's perspective, it was admitted that at the height of the market that while covenant strength was a relevant criterion in lending decisions it was not the dominant factor. Balance sheet loans, cash flow, lease length and re-letting prospects were more important considerations but the emphasis, once again, appeared to be on short term trading volumes without fully appreciating the risk posed to the loan book during a downturn in the market. Stress testing loans is laudable provided the inputs reflect the reality of the market, during, and at the end

of the loan period. The inference is of some inadequate forecasting and misreading of the cycle. The repricing of debt did occur from mid-2007, but the availability of cheap debt finance was undoubtedly a major reason for the overheating of the commercial market. In the securitised market the performance of the rating agencies, key in the pricing of fixed income securities, has come in for heavy criticism, and as positions unravel this is worthy of further research.

The investors confirmed that it is the combination of lease length and covenant strength which is absolutely key when analysing cash flow risk. It was acknowledged that covenant strength attracted a lower risk premium while the market was performing well and that positions had been taken in the market which, with hindsight, had not been properly priced. Investors appear guilty of pricing at a point in the cycle rather than taking the longer view and pricing through the cycle. While it was evident that much research is focused on assessing the risk of individual tenant default, there was less analysis done on a sector or regional basis and this would be worth exploring further.

In the property market covenant strength risk should affect the capital value, through the selection of the initial yield, and the level of income return. Our research has shown that the risk premium should reflect the contribution of covenant strength to the overall risk of the investment, both at property and portfolio level. Future risk analysis will have to be more robust in order to avoid a repeat of the 'irrational exuberance' which characterised the UK market in recent years.

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