Robustness of Property Income

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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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IPF Research Programme 2006–2009

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Robustness of Property Income

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Executive Summary

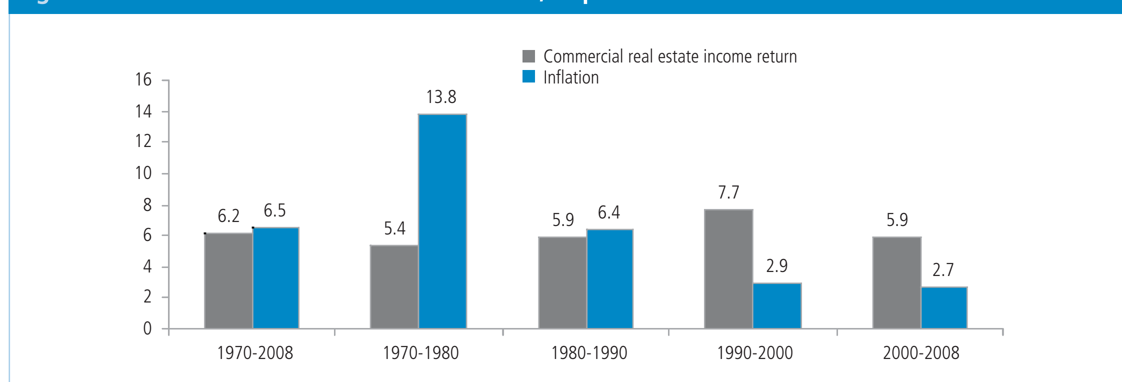
The primary investment attribute of long term investment in commercial real estate is a secure income stream. In part, this security is driven by the long term durability of tenant demand for space. In addition, lease terms act to smooth the income that investors receive from real estate and enhance the security of that income. Lease lengths have, however, been trending downwards significantly due, in part, to the Government Lease Code as well as wider market pressures.

Shortened lease terms have, inevitably, increased real estate income volatility both at the aggregated market level but more significantly on individual assets. As we move through the present recessionary cycle and continue to see rental values falls, we can expect to see a much faster fall in the actual income received by investors than that experienced in the last major rental downswing of the early 1990s. Moreover, the income owners receive on their assets that secures the loans made by lenders to real estate will also be less protected on the downside.

Commercial real estate has exceptional income delivery characteristics

Real estate has a proven long-term record of delivering a stable income return to investors. Over the period since 1970 this income return has averaged 6.2% pa, just below the average inflation rate of 6.5%, indeed the income return from real estate has actually been more stable than inflation levels.

Figure 1: Commercial real estate income return, % pa



The pattern of income delivery is influenced firstly by the fundamentals of demand and supply

The income return to investors from a real estate asset is the rent received from the leasing of space to tenants, less any costs associated with maintaining the fabric of the asset and collecting the rent. Many categories of maintenance costs are the responsibility of the tenant under typical UK lease terms, although there is a spectrum of arrangements from the 'Full Repair & Insurance' lease to 'fully serviced' accommodation whereby the landlord is increasingly responsible for the costs of maintaining the space.

The rent that tenants are willing to pay is a function of its utility, which in turn is driven largely by three characteristics: the property's use class (retail or office, for example), asset location (the region, town or even street) and building condition (often described in terms of Grade A to E).

The aggregate tenant demand for, and availability of, space with these different characteristics varies over time and determines the rent that the tenant is willing to pay to lease an individual property or unit within a property. When assessing the value of an asset for investment or tax purposes, the assessment of the current level of rent that would be commanded by the space within an individual asset in the market is known as the *estimated market rental value.*

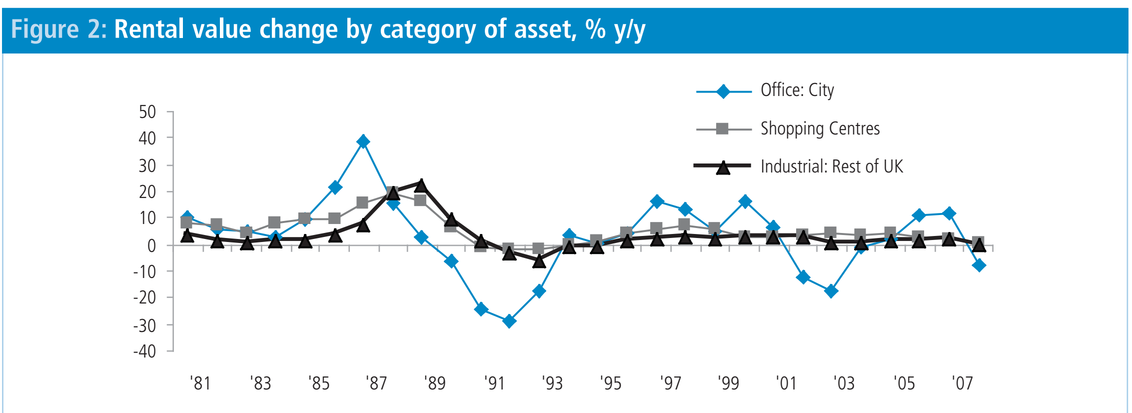
As the balance of demand for, and availability of, space varies over time, so the estimated market rental value will vary over time. Rising rental values are associated with rising tenant demand and limited supply, whilst falling tenant demand and/or a rising supply of new space will depress rental values.

The volatility of rental values is therefore determined by fluctuations in tenant demand, which are strongly correlated to the business cycle, and availability of space, which is in turn related to building cycles. These are themselves a lagged, often exaggerated, response to rising rental values.

The investment characteristics of real estate assets therefore vary across categories of assets differentiated by use class, location and building condition in accordance with the nature of demand and supply over time. For sectors where demand is more volatile and building cycles more pronounced, rental values are generally more cyclical.

In Figure 2, we can see the more volatile characteristics of City office rental value change compared to regional industrials and shopping centres, and also substantial differences in the rate of long run rental value change across these property types.

Figure 2: Rental value change by category of asset, % y/y



Income delivery is also influenced at the asset level by obsolescence and changes in the attractiveness of each asset's location

Real estate assets are physical investments. Rental values for individual parcels of space are therefore affected by two additional factors. First, the relative utility of the location can improve or be marginalised. Second, the physical characteristics of the asset will deteriorate over time and diminish further the utility of the building and, thereby, its rental value. These characteristics are not just a deterioration of the physical structure, but also the aesthetics of the building; it's compliance with current law (such as compliance with accessibility for the disabled) and functional layout, such as raised floors or open plan layout.

What the aggregate figures conceal is a wide range of rental value change rates for individual assets *within* categories of assets. For example the volatility of individual shopping centre rental value change has varied on average by 3.2% pa, compared to 1.6% pa on regional industrials over the 10 years from 1998 to 2008.

In other words, rental value change of *individual* shopping centre assets is spread over a much wider range than found for *individual* regional industrial assets even though the average volatility over time of shopping centre rental value growth is below that of regional industrials.

So owners or lenders to real estate are exposed to more volatility at the individual asset level than that revealed by the volatility of market average rental values. Individual assets will experience additional, and very significant, additional volatility as the utility of asset's location and specification to tenants, changes.

Income delivery us influenced by the terms of the lease

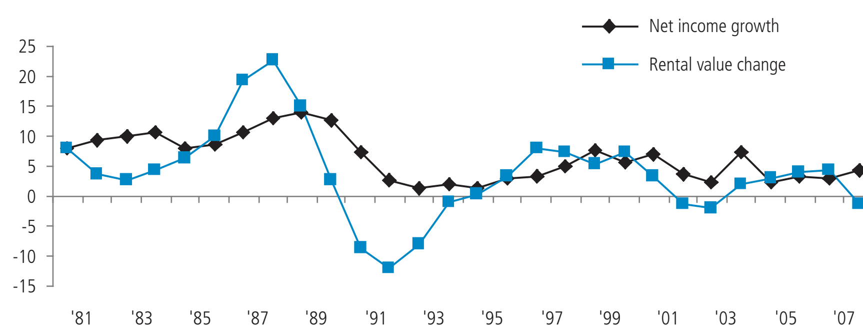
This additional asset specific volatility is particularly important to consider when quantifying the stabilising influence of the additional crucial dimension to the income delivery characteristics of real estate: leasing.

The lease provides security to the income stream with the tenant contracted to lease the space for a pre-defined period on pre-defined terms. The terms upon which space is leased to a tenant will determine the income that the investor actually receives, which will differ from the current estimated market rental value, being historic.

The rent paid by the tenant is set at the beginning of the lease with adjustment mechanisms within the lease determining the manner of change in rent through the course of the lease. Normally in the UK these adjustment mechanisms do not allow for the rent to fall and so provide a floor to the downside risk to the income received by investors. Rent is typically adjusted through the course of a lease through either adjustment to prevailing market rental values at predefined intervals or to an index such as the Retail Price Index.

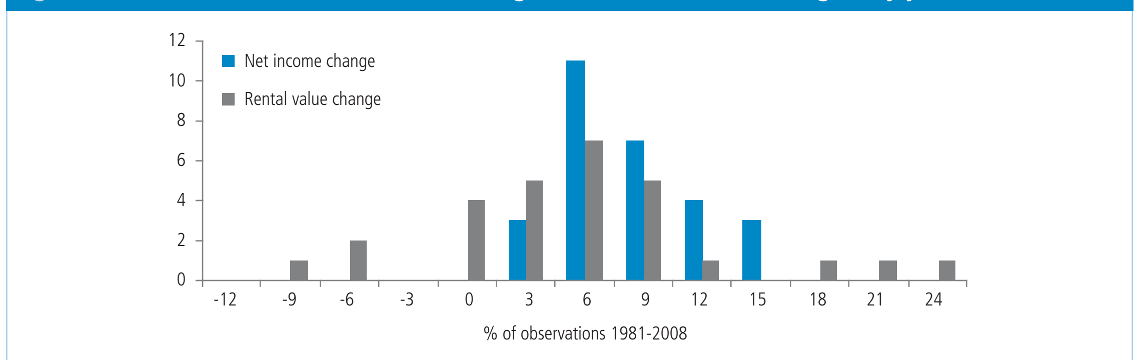
The end result is that the lease generates a pattern of investor income that is more stable than the underlying pattern of estimated market rental value change. The volatility of market average income change, 3.8%, is half that of rental value change, 7.4%, and this ratio is lower the more volatile the rental value change of a category.

Figure 3: The average change in net income on real estate assets, % y/y



The distribution of annual changes in market income is therefore more concentrated than that of rental value change. The distribution of rental value change accords more closely to that of a Normal distribution with a peak in the distribution around the average value and a fairly wide symmetrical pattern of values both above and below (perhaps hinting at the existence of 'fat tails'[1]). In contrast the distribution of annual changes in net income is much more strongly peaked, with no observations significantly below this peak and whilst more of a spread above, no observations are significantly so.

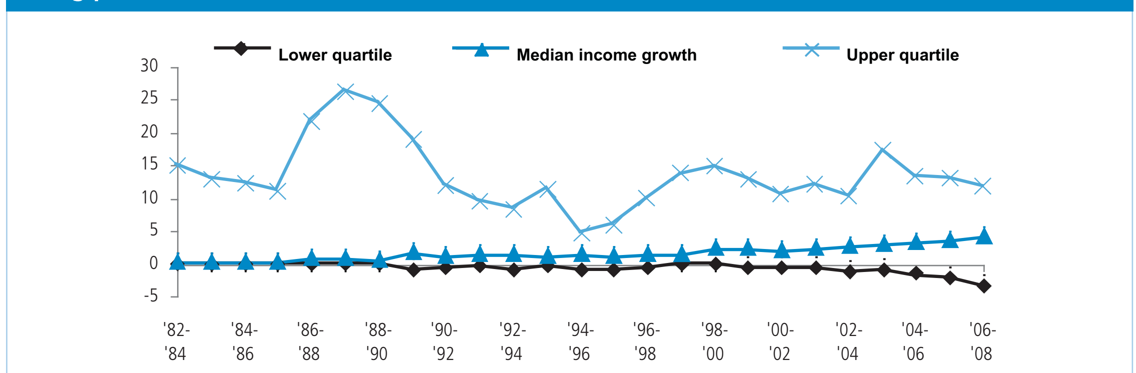
Figure 4: The distribution of net income change versus rental value change, % y/y



There is also an asymmetric pattern to income change on individual real estate assets. This is because during the term of the lease the rent is stationary between rent reviews and at rent review the rent may rise significantly as the rental value growth over the period since the last review is concentrated into one review.

The forgoing of annual upward revisions in rent for concentrated upside movements at the end of five years – effectively a reduction in the rent that a tenant would have paid for annual uplifts - is arguably a trade-off for the 'downside' protection for the landlord from a fall in rental value. So, for the majority of leases which are subject to the upward only rent review clause, even if the estimated market rental value has fallen over the period since the last review the rent at review will not fall. As a result a much larger proportion of assets generate no income change in any individual year compared to those generating rising income and this is greater again than those experiencing falling income.

Figure 5: The inter-quartile range of net income change across individual assets, % over 2-year rolling periods



[1] The observed number of very high and very low outcomes is higher than those expected from a "normal" distribution of data

Figure 5 shows that during the period 1982 to 1990 the income change on more than 75% of assets was consistently positive and even during the early 1990s – when the occupier market was weak and rental values were falling – only a small minority of assets experienced falling income.

So, in summary, in the UK commonly used lease conditions act to smooth the income delivery characteristics of real estate compared to the characteristics of prevailing market rental values. This protection is greater than suggested by the simple volatility of average market rental value growth because changes in rental values on individual assets are much more volatile than the market average. As lease lengths have shortened, the income stream from real estate has become less protected on the downside.

So how robust is the income from real estate today?

To utilise data from the last property market downturn as an estimate of the robustness of property income is potentially misleading as new lease lengths have fallen. To consider how the robustness of property income has changed, we need to contrast the average lease position today with that of the last major rental downturn in the early 1990s.

As new lease lengths have fallen over time the average unexpired lease term in the market has been falling. In 1992, the earliest data that we have available, one-third of assets had an average unexpired lease term of less than five years, by 2008 this has risen to two-thirds. Please note that IPD did not collect data on break clauses in 1992.

Table 1: IPD estimate of average unexpired lease terms on all UK commercial real estate (proportion of existing leases)

	<5 years unexpired	5-10 years unexpired	10-20 years unexpired	20 years+ unexpired
1992	32.6%	12.3%	33.8%	21.4%
2008	62.5%	21.7%	12.4%	3.5%

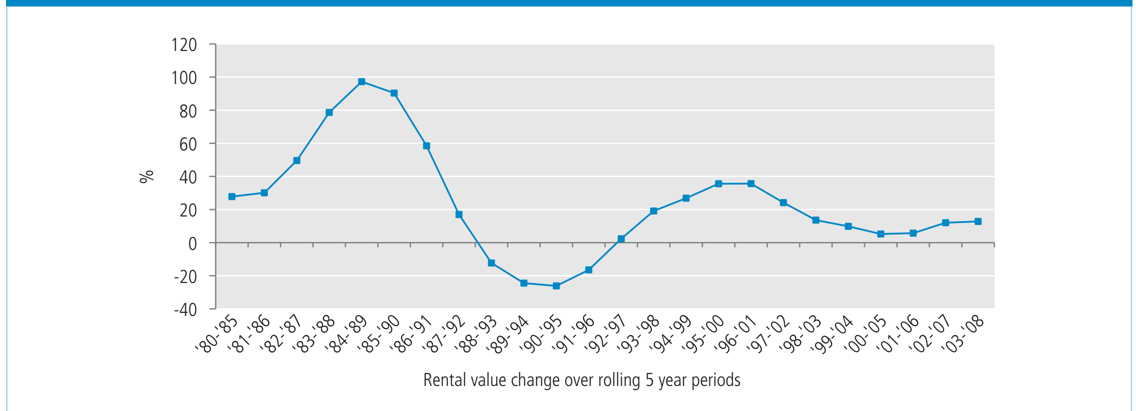
In addition to the shortening lease lengths that have reduced the downside protection to property income, the upside potential to property income is lower in this cycle than going into the last downturn.

This potential upside to income is created due to the gap between dates at which rent is reviewed so that growth in market rental values after a rent review will not be reflected in the actual rent paid until the next review date – the reversionary potential.

The latest upswing in market rental values has been much more muted than the surge in rents in the years preceding the early 1990s downturn. On average rental values were still 58% higher in 1991 (the first year of the rental slump) than 1986: so leases on a 5-year rent review pattern with a rent review in 1991 will still have been due a large uplift. This compares to rental values that are on average 12.8% higher in 2008 than 2003 (see Figure 6).

ROBUSTNESS OF PROPERTY INCOME

Figure 6: **Rolling 5-year change in rental values, %**



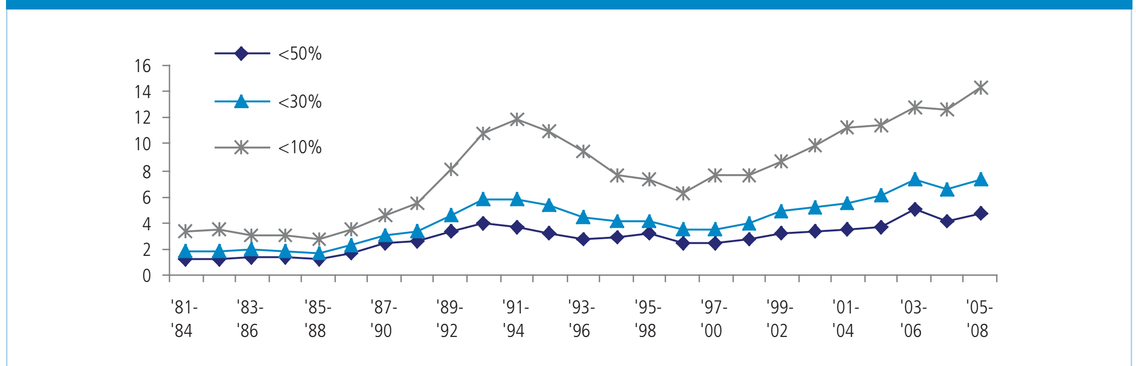
This combination of leasing characteristics and the strong preceding growth in market rental values meant that over the four years from 1990 to 1994 there was positive net income change on all UK commercial real estate in each year, despite a fall in market rental values of -27%.

The income change at rent review, due to the five year review pattern (or even 7, 14 or 42 years from very historic leases) therefore outweighed the loss in income from tenant defaults, breaks being exercised and leases not being renewed.

The shorter average unexpired lease term and weaker preceding growth in market rental values in this cycle will create a starkly different outcome in actual income for the same fall in market rental values.

Indeed the reduced robustness in income is already detectable when looking at the data on individual assets from a potential bank lender's perspective. In Figure 7 we have expressed the proportion of assets experiencing a fall in rent passing over rolling 3-year periods in terms of the *proportion* of individual assets that would have breached typical interest cover levels of 1.5, 1.3 and 1.1. The exact analysis was based upon annual rent passing at the end of the year and excluded assets currently vacant.

Figure 7: **The proportion of real estate assets experiencing a fall in rent passing, %**



The remarkable result is that over each of the 3-year rolling periods from end 2003 to end 2008 there was already a higher proportion of assets experiencing falls in rent passing greater than in the trough of the last major rental downturn in each of our 3 chosen income fall thresholds. This shows that in a market that experienced weak growth in market rental values the influence of more frequent lease expiries and the insertion of more break clauses in leases, the income stream from real estate had already become less secure towards the end of this decade than during the deepest falls in rental values in the early 1990s, at every level of interest cover.

The current downturn: lease expiry & break profile

To gauge how far income levels will fall in the current downturn we must consider the upward and downward influences on income in the coming years.

We have documented above falling lease terms and Column A of Table 2 documents the expiry profile of rent passing. This shows that nearly -15.2% of rent passing is directly at risk from a lease expiry or the exercising of a break clause over the next three years.

Table 2: IPD Estimate of the future income potential of UK commercial real estate

	Subtract:	Add:				Total:
	Non-renewal or break exercised (A)	Re-letting of Expired Tenancies (B)	Expiry of Rent Free Period (D)	Reversions at Rent Review & Steps (C)	Assumed Letting of Vacancies & Developments (E)	Total Potential Rental Income (F)
O/due	-1.1%	+1.0%	+0.0%	+1.2%	-	**101.2**
2009	-4.8%	+4.5%	+2.0%	+2.3%	+4.4%	**109.6**
2010	-4.3%	+4.1%	+0.4%	+1.7%	+5.2%	**116.6**
2011	-5.0%	+4.8%	+0.1%	+0.8%	+2.6%	**119.8**
Total	**-15.2%**	**+14.4%**	**+2.5%**	**+6.0%**	**+12.2%**	**19.8%**

Of course a proportion of these leases will be renewed and not all the breaks will be exercised. For those leases subject to a lease expiry or break the rent at renewal or re-letting will be marked to existing rental values. In aggregate the estimated rental value of these units, +14.4% [Column B], is below the current rent passing -15.2% [Column A] This means there is a 'top-slice' of current income that will probably be lost at lease renewal or re-letting.

As discussed above the upwards influence on rents includes the collection of existing reversionary potential from rental values that have risen in the upswing but not yet been collected at review. In total, as at the end of December 2008, the gap between the current rent passing and market rental values is +6.0% [Column C]

In addition some units that have been recently let are within a rent free incentive period. In total there is a *contracted* +2.5% uplift in income as units currently within a rent free period move up to the agreed rent [Column D].

The largest potential uplift to income comes from the letting of current vacant units, including development nearing completion. These units could potentially add a further +12.2% to total income [Column E].

Table 2 has therefore documented the potential change in income and the key dates of the events that will drive this income change. This total potential is 19.8% [Column F].

The current downturn: Expected lease outcomes

A very wide range of market income changes can be projected from these figures. A simple scenario would be to assume that all contracted leases came to an end and only contracted uplifts in rent were achieved. With these assumptions the income from real estate would fall by around -2.8% in 2010, -3.9% in 2011 and -4.9% by 2011.

The exact balance between the loss in income from lease expiries and breaks [Column A] and the gain in rent from re-lettings [Column B] will depend upon the propensity of tenants to renew their leases and exercise their break clauses and the uncertainty is compounded by the length of the rent free incentive periods on renewal or re-letting.

Whilst the expiry of current rent free periods [Column D] is contracted, the uplift at rent review [Column C] is subject to the uncertainty of changing market rental values up to the point of the rent review.

The letting of current vacancies is a particularly large source of uncertainty as to the path of future income change. The potential income is large but the deeper the occupier market downturn the longer these units will take to let, the longer the likely incentive periods given to tenants and the lower the ultimate letting rent.

Of course the vast majority of rent is still secured by current leases that are not subject to renewal or a break in the next three years. However, there is the potential for these tenants to default. In 2008 it is estimated that 5.5% of tenants, weighted by rent passing, were rated on the two lowest possible credit rating grades by Dunn & Bradstreet. **This figure needs to be treated with great caution** as it is quite possible that businesses will continue to trade in administration and to therefore continue to pay the rent, particularly in retail. For example, in 2007 only 20% (by number of units occupied) of the units occupied by tenants rated in the two lowest possible credit rating grades were vacant at the end of 2008. Half of the remaining units had been re-let and half of the tenants were still in occupation.

The current downturn: Historical evidence

The Strutt & Parker IPD Lease Events Review seeks to provide historical guidance as to the likely outcomes from several of these influences.

The results of the Review have suggested a long term lease renewal rate of 35%, based on an All Property 11 year average, weighted by ERV, and long-term propensity of tenants to break of 27%, based on an All Property 11-year average, weighted by ERV.

The current downturn: A projection

If we assume:

(i) a replication of the average historical renewal rate

(ii) that current vacancies either remain vacant or contribute no income change due to a long rent free period upon letting

(iii) all reversion is lost due to significant rental value falls and

(iv) 1% of income is lost due to tenant default

This would suggest acceleration in the rate of average income falls from -2.2% to -4.2% over the next 3 years. However, a wide possible range of outcomes could be calculated using an alternative set of assumptions!

What can be predicted with *certainty* is that a much higher *proportion* of assets will experience significant income falls than in previous downturns.

Conclusion

Commercial real estate delivers a secure income stream to investors. In part this security reflects the long run fundamentals of demand growth and land supply, which set long run rental growth around the rate of inflation. But in the shorter term lease terms play the major role in smoothing fluctuations in market rental values into a relatively stable flow of income. This protection is much more significant than commonly perceived through assessment of the volatility of average rental values. This is because the changes in rental values for individual assets are much more volatile than the sector average.

As lease terms shorten the income from real estate is becoming more volatile. As we head into the first across-the-board fall in rental values since the changes in lease terms brought about by the 1990s slump, we can expect to see a much faster fall in income than in previous downswings. This should lead to an upward revision in the risk premium demanded from the asset by investors and in the 'margin' demanded by lenders for financing. Ultimately, this could affect percentage allocations made to property by multi-asset investors.

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