The Investment Performance of Listed Offices

Investment Property Databank Ltd for English Heritage,
Investment Property Forum and The Royal Institution of Chartered Surveyors

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Summary

- The West End of London accounted for three fifths of the listed offices owned by investors at the end of 2004, measured by both number of properties and by capital value.
- Listed offices are typically not only older than other offices held in investment portfolios, but also smaller.
- In keeping with their older age profile, listed buildings tend to command lower rental values than newer, unlisted buildings. The exception is in the City and Mid-Town where rental values per square metre are slightly higher than those on unlisted buildings.
- In the West End and outside Central London equivalent yields on listed offices are in line with those on unlisted offices. In the City and Mid-Town equivalent yields on listed offices were slightly below those on unlisted offices at the end of 2004.
- Listed offices under-performed unlisted offices in the West End in 2004. In the City and Mid-Town total returns on listed and unlisted offices were identical in 2004, while outside Central London, listed offices out-performed unlisted offices by quite a margin.
- Over the long-term, listed offices have tended to follow the same market cycle as unlisted offices with simultaneous peaks and troughs. Differences in the volatility of returns between the two types have been minimal, indicating similar levels of risk.
- In both the City and the West End total returns on listed offices ran slightly below those on unlisted offices between 1980 and 2004. While rental growth on listed offices matched or exceeded that on unlisted offices, yields on listed offices have tended to rise relative to those on unlisted offices.
- Outside Central London, total returns on listed offices ran slightly ahead of those on unlisted offices between 1980 and 2004. Rental growth on listed offices has matched that on unlisted offices and listed offices have not suffered the negative yield re-rating seen in Central London, possibly because equivalent yields were never below those on unlisted offices.
- Although the long-term performance of listed and unlisted offices appears to have been identical at the national level, the comparison is misleading because listed offices are heavily concentrated in the West End, which has been one of the best performing office locations. If the favourable influence of the West End is removed, long run total returns on listed offices have run marginally below those on unlisted offices by around 0.3% per year.
- On balance the prospects for future income growth on listed offices are stronger than those on unlisted offices, due to some relatively large reversions in London. Within London, the void rate on listed offices at the end of 2004 was higher than that on unlisted offices. Outside London, listed offices had a lower void rate than unlisted offices.
- Over the long-term owners of listed offices have incurred lower refurbishment costs than investors in more modern, unlisted offices. The finding suggests that investors in listed offices have not had to spend more on refurbishment, in order to attract and retain tenants.

1. Introduction

1.1 Report Structure

This report examines the investment performance of listed offices in England, based on confidential financial data collected and analysed by IPD. The report has three main sections:

- Section 2: Performance of the UK Property Market. This section examines the latest performance of the UK property market, covering both 2004 and the first nine months of 2005.
- Section 3: IPD Sample of Listed Offices. This section describes the IPD sample of listed buildings in terms of location, physical characteristics and their relative pricing in occupier and investment markets at the end of 2004.
- Section 4: The Investment Performance of Listed Offices. This section compares the total returns on listed and unlisted offices to see if the investment performance of listed buildings has been materially different. The returns have been compiled so that they fully reflect the costs and benefits of refurbishment and other capital expenditure. In order to control for the heavy concentration of listed offices in the West End of London, the analysis is carried out in three broad areas. The section concludes with an attribution analysis to separate out the influence of region and status on the long-term performance of listed offices at the national level.
- Section 5: Income and Occupancy at End-2004. This section compares the level of voids in listed and unlisted offices at the end of 2004 and considers the prospects for income growth, given current levels of reversions and the incidence of over-renting.
- Section 6: Improvement Expenditure. This section analyses the long-term rate of capital expenditure by landlords on refurbishments of listed offices and compares it with the level of improvement expenditure on unlisted offices.

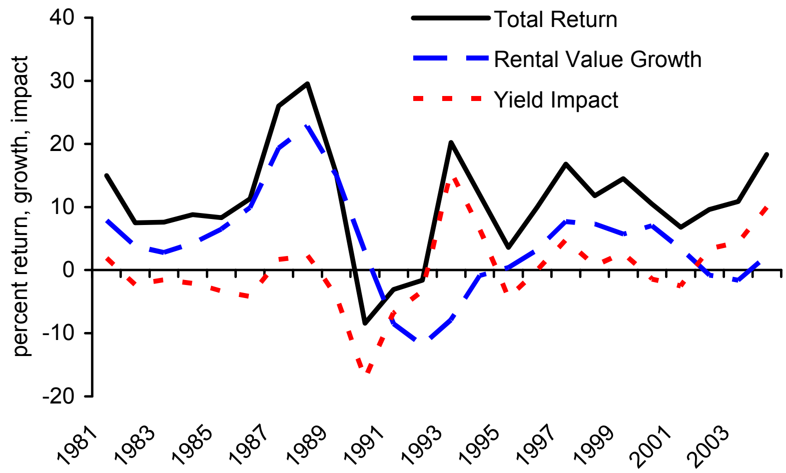
A full set of performance data and a glossary of terms are presented in the Appendix.

2. Performance of the UK Property Market

2.1 The Property Market in 2004

The UK property market went from strength to strength in 2004 with all property total returns on standing investments virtually doubling from 10.9% in 2003 to 18.3% in 2004. The driving force was a favourable shift in yields. The all property equivalent yield fell by 66 basis points in 2004, boosting capital values by 10%. While rental growth was positive for the first time in three years, its contribution to capital growth was modest, at 2.3%.

Figure 1: All Property Performance 1980-2004

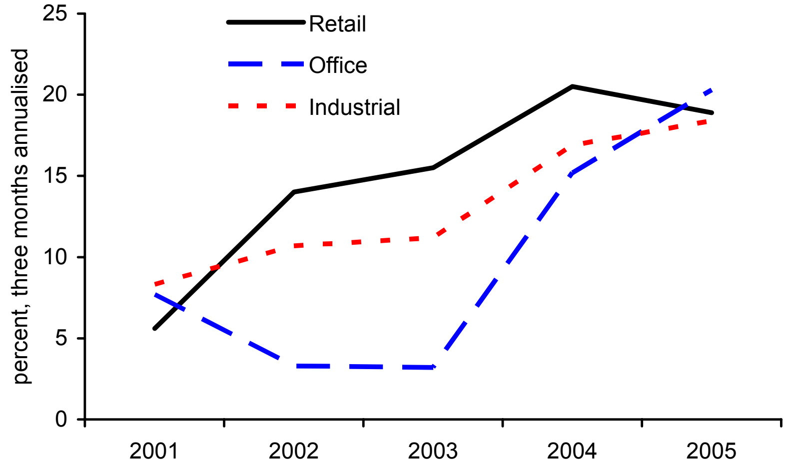


The main downward pressure on yields came from the institutions, which came back into the market, taking over the running from private property companies. Detailed figures reveal that the big spenders were Property Unit Trusts attracting money from pension funds and quoted investment companies designed for retail investors. While some of this capital may have switched into property as a short-term response to the disastrous performance of equities between 1999 and 2002, there also appears to have been a permanent shift in the investment strategies of pension funds. Widespread deficits caused partly by the downturn in the Stockmarket, but also partly by rising life expectancy, have led actuaries to recommend that pension funds should invest less in equities and more in other assets such as bonds and property which better match their liabilities.

2.2 The Property Market in 2005

In 2005 all property total returns out-performed 2004 with a total return of 19.1%. This reflects that the demand for property has remained exceptionally strong. The all property equivalent yield fell by a further 60 basis points over the year as a whole and added 11.6% to capital values. Rental growth has pottered along at 3.9% for 2005.

Figure 2: All Property Performance, Five Years to December 2005



Source: IPD Annual Index

A major feature of the market this year has been the convergence in returns across the three main sectors. In 2005 the range between returns in the three sectors was a mere 1.9% compared to 5.3% in 2004. Most of the narrowing in the range reflects the improvement in the office rental trend. Having been negative at -10.1% per year at the end of 2003, office rental value growth recovered to 1.9% per year in 2005.

The other important influence has been a shift in investor sentiment against the retail sector. During 2002 and 2003 retails saw by far the largest fall in yields. By contrast, this year retails have seen the smallest declines in yields, in both absolute and relative terms. The negative relative re-rating of the retail sector would appear to be partly a function of fears about the housing market and weaker consumer spending, and partly due to concerns about the apparently unstoppable march of supermarkets into clothing and other non-food consumer products.

The up turn in rental growth as well as a considerable compression in yields caused the office sector to out-perform both retail and industrial for the first time since 2000.

3. IPD Sample of Listed Offices

This section describes the IPD sample of listed buildings in terms of location, physical characteristics and their relative pricing in occupier and investment markets at end-2004.

IPD has identified a sample of 221 offices which are designated as either Grade I, or Grade II listed buildings by English Heritage. (See Glossary). The sample includes both offices in IPD's main databank of December valued properties and offices owned by other investors which are valued every March. The total capital value of this combined sample was £1.6 billion at the end of December 2004 / March 2005. In order to keep the report concise and aid interpretation of the results, the performance series will be referred to as if they related to calendar years and as if the year-end for the sample of properties was each December.

Table 1 looks at the geographic spread of both the listed offices and unlisted offices owned by investors reporting to IPD. It reveals that the sample of listed office buildings is much more heavily concentrated in the West End of London than the sample of unlisted offices.

Table 1: Geographic Breakdown of IPD Sample of Listed Offices at end-2004

	Number of Properties	Capital Value £ million	Average Lot Size £ million	Percent of Capital Value
Listed Offices				
City & Mid-Town	47	342	7.3	21.6
West End	128	968	7.6	61.1
Outer London	5	39	7.8	2.4
All London	180	1,349	7.5	85.1
Southern England[1]	23	77	3.3	4.8
Rest of England	18	159	8.9	10.1
All Listed Offices	**221**	**1,585**	**7.2**	**100.0**
Unlisted Offices				
City & Mid-Town	531	9,598	18.1	28.5
West End	446	7,937	17.8	23.5
Outer London	279	3,625	13.0	10.8
All London	1,256	21,161	16.8	62.8
Southern England[1]	978	9,066	9.3	26.9
Rest of England	400	3,478	8.7	10.3
All Unlisted Offices	**2,634**	**33,705**	**12.8**	**100.0**

1. Southern England includes Eastern, the South East and South West regions.

- The West End accounted for three fifths of the listed offices owned by investors at the end of 2004, measured by both number of properties and by capital value.
- Although the West End is a major investment location, its share of holdings of unlisted offices was much lower at 24% of capital value.
- Over a fifth of the West End offices held in investment portfolios were listed at the end of 2004, measured by number, compared with 7% across the country as a whole.
- The City and Mid-Town accounted for 22% of the capital value of listed offices at the end of 2004, broadly in line with their share of overall portfolios. The proportion of City and Mid-Town offices which were listed at the end of 2004 was 8%, close to the national average.
- Outer London, Southern England and the Rest of England accounted for only 17% by value of the sample of listed offices held in investment portfolios at the end of 2004, compared with 48% of unlisted offices. The majority of the sample of listed offices was in the Rest of England, measured by capital value, whereas the sample of unlisted offices was skewed towards Outer London and Southern England.

The dominance of the West End in the sample of listed buildings means that any comparison of the performance of listed and unlisted offices at the national level must be treated with a degree of caution. It is conceivable that differences in the performance of listed and unlisted offices at the national level are more a reflection of the peculiarities of the West End office market, than the different status of the two sets of buildings. Accordingly, the analysis in Section 4 controls for locational influence by comparing the performance of listed and unlisted offices within three broad areas of the country.

Table 2 looks in more detail at the characteristics of the listed offices in investment portfolios in terms of their rental value per square metre, capital value per square metre, average floorspace and equivalent yield. Figures 3 and 4 compare the age profile of listed and unlisted buildings in London and outside London.

Table 2: Rental and Capital Values of IPD Sample of Listed Offices at end-2004

	ERV Per square metre	Capital Value Per square metre	Average Floorspace square metres	Equivalent Yield
Listed Offices				
City & Mid-Town	319	3,315	2,194	6.9
West End	314	4,117	1,837	6.6
All London	309	3,766	1,989	6.8
South & Rest England	157	2,080	2,767	7.6
All Listed Offices	**268**	**3,309**	**2,167**	**6.9**
Unlisted Offices				
City & Mid-Town	305	4,026	4,490	7.4
West End	355	5,102	3,488	6.6
All London	295	4,023	4,188	7.1
South & Rest England	171	2,253	4,083	7.7
All Unlisted Offices	**229**	**3,088**	**4,099**	**7.4**

Figure 3: Age Profile of London Offices

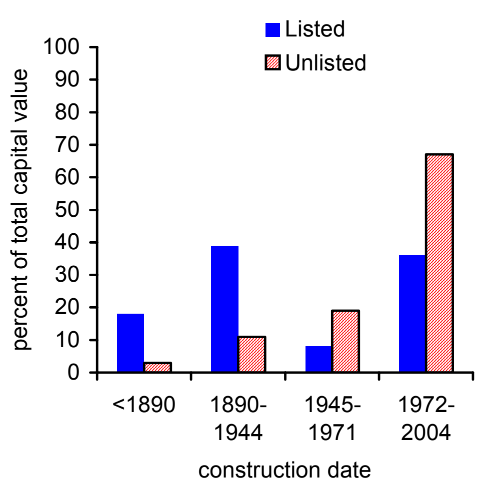
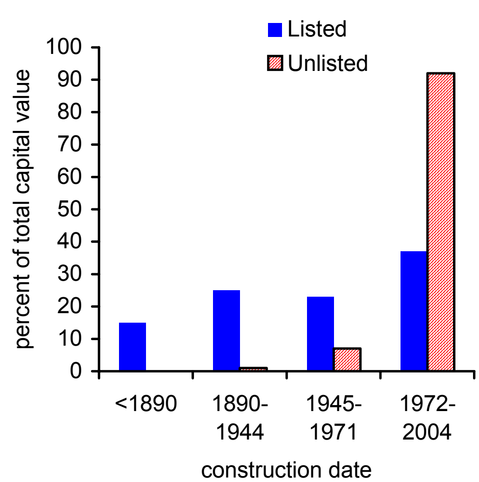


Figure 4: Age Profile of South & Rest of England Offices



Note. The construction date recorded by IPD will differ from the original date if there has been a major re-development behind the facade of the building.

By definition, the listed office buildings owned by investors are older than the stock of unlisted offices. Focusing on the London office market:

- Over half of the listed office buildings in London covered by IPD were built before 1945, measured in terms of capital value, against only 14% of unlisted offices. Many of the older buildings which are not listed are nevertheless in conservation areas where there are additional planning controls and guidelines on re-development.
- Listed buildings are also typically small. The average floorspace of listed buildings in the City and West End is around 2,000 square metres, half the unlisted average.
- In keeping with their older age profile, listed buildings in the West End tend to command lower rental values than newer, unlisted buildings. The difference between listed buildings and the average for all West End offices was –12% at the end of 2004.
- However, the same pattern does not hold in the City and Mid-Town where the average ERV for listed buildings was 4% above the average for unlisted offices at the end of 2004. Arguably, this apparent anomaly in part reflects intense competition from the Canary Wharf business district which has depressed the rental values of new large offices in the City.
- The equivalent yield on listed offices in the West End equalled the market average (6.6%) at the end of 2004, indicating that investors anticipate that future rental growth will match that on unlisted offices. One interpretation of this pricing is that investors believe that the disadvantages of an older specification and obsolescence are balanced by relatively prestigious locations.
- In the City and Mid-Town, the equivalent yield on listed buildings at 6.9% at the end of 2004 was lower than the average for unlisted offices (7.4%), suggesting that investors expect listed offices to achieve faster rental growth over the medium-term.

While the physical characteristics of the sample of listed offices in Southern England and the Rest of England are slightly different from those of listed offices in London, their relative pricing in occupier and investment markets is quite similar.

- Although listed offices in Southern England and the Rest of England are predictably much older than unlisted offices, the “generation gap” is less pronounced than in London. Only 40% of the listed offices in Southern England and the Rest of England in investment portfolios were built before 1945, measured by capital value.
- Likewise, although listed offices in Southern England and the Rest of England are generally smaller than newer, unlisted offices in the two broad regions, they are typically larger than listed buildings in London.
- In common with the West End, rental values on listed offices in Southern England and the Rest of England were below the average for unlisted offices in the two broad regions. The gap at the end of 2004 was –8%.
- The equivalent yield on listed offices in Southern England and the Rest of England was 7.6% at the end of 2004, a fraction below the average for unlisted offices.

Finally, Table 3 shows how the sample of listed and unlisted offices has changed since 1981, when IPD records began. The data indicates that while there has been a long-term decline in the number of both listed and unlisted offices in portfolios, the decline in listed offices has been more precipitous. Whereas the number of unlisted offices fell by 10% between 1981 and 2004, the number of listed offices halved. Likewise, listed buildings’ share of the total capital value of offices in IPD shrank from 8.3% to 4.3% over the same 23 year period. The fall in the importance of listed buildings in the office portfolios covered by IPD reflects a number of factors: the growing preference of institutional investors for larger lot size properties and the wholesale selling of smaller properties to private property companies and other investors typically not covered by IPD: the drive by institutions to modernise their holdings and concerns about obsolescence in older buildings: the geographic diversification of office portfolios away from Central London and towards locations which are perceived to be less volatile, in particular South East England.

Table 3: IPD Sample of Listed and Unlisted Offices, 1981-2004

	Number of Properties			Capital Value		
	Listed Offices	Unlisted Offices	Listed as % of Total	Listed Offices	Unlisted Offices	Listed as % of Total
1981	453	2,829	13.8	714	7,558	8.6
1982	483	2,940	14.1	792	8,256	8.8
1983	492	3,171	13.4	888	10,269	8.0
1984	519	3,217	13.9	964	11,234	7.9
1985	532	3,339	13.7	1,074	12,432	7.9
1986	558	3,326	14.4	1,257	13,597	8.5
1987	546	3,164	14.7	1,608	17,724	8.3
1988	551	3,134	15.0	2,089	22,877	8.4
1989	564	3,178	15.1	2,416	26,462	8.4
1990	582	3,287	15.0	2,226	23,360	8.7
1991	576	3,388	14.5	1,764	19,959	8.1
1992	568	3,461	14.1	1,521	17,134	8.2
1993	535	3,499	13.3	1,578	19,221	7.6
1994	533	3,718	12.5	1,774	20,918	7.8
1995	505	3,626	12.2	1,779	20,537	8.0
1996	518	3,512	12.9	1,766	20,753	7.8
1997	454	3,388	11.8	1,725	23,307	6.9
1998	424	3,401	11.1	1,763	27,061	6.1
1999	382	3,229	10.6	1,743	29,950	5.5
2000	364	3,245	10.1	2,005	35,321	5.4
2001	305	3,084	9.0	1,846	37,350	4.7
2002	277	2,975	5.5	1,759	35,389	4.7
2003	250	2,722	8.4	1,497	31,554	4.5
2004	221	2,634	7.7	1,585	33,705	4.5

Figure 5: IPD Sample of Listed Offices

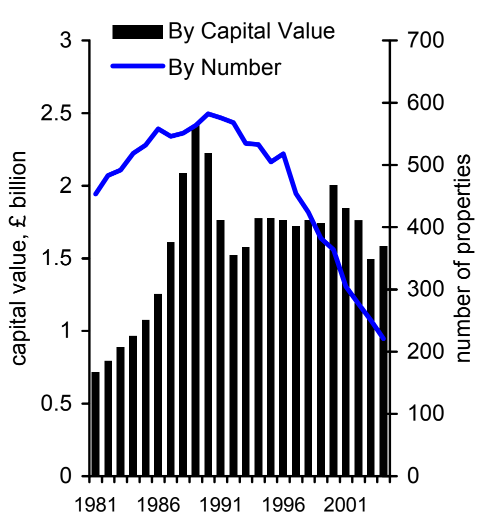
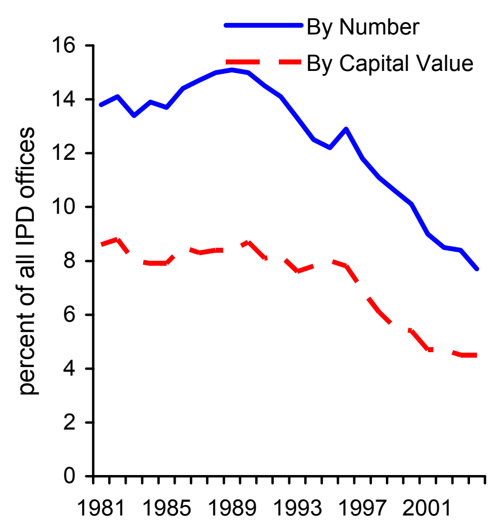


Figure 6: Listed Offices as Percent of All IPD



Conclusions

- The West End of London accounted for three fifths of the listed offices owned by investors at the end of 2004, measured by both number of properties and by capital value.
- Listed offices are typically not only older than other offices held in investment portfolios, but also smaller.
- In keeping with their older age profile, listed buildings tend to command lower rental values than newer, unlisted buildings. The exception is in the City and Mid-Town where rental values per square metre are slightly higher than those on unlisted buildings.
- In the West End and outside Central London equivalent yields on listed offices are in line with those on unlisted offices. In the City and Mid-Town equivalent yields on listed offices were slightly below those on unlisted offices at the end of 2004.

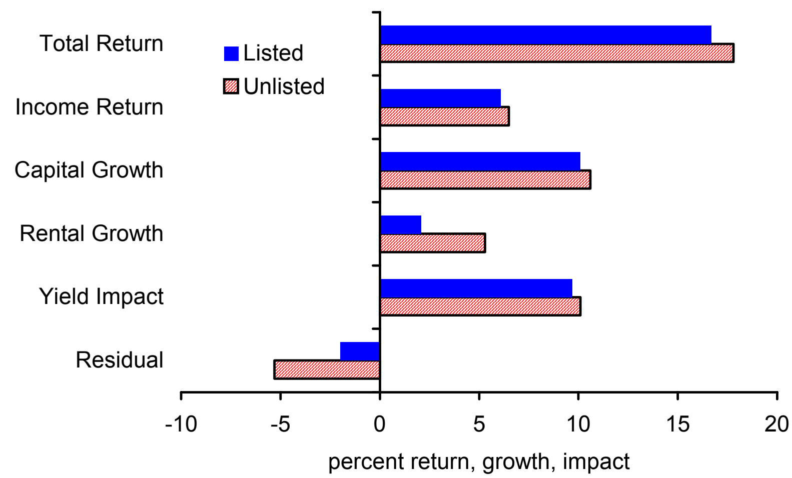
4. The Investment Performance of Listed Offices

This section looks at the differences in total returns on listed and unlisted offices. The series have been compiled on IPD's managed standing investment basis to fully reflect the costs and benefits of refurbishment and other capital expenditure. The previous section considered the characteristics of listed offices and showed that they are heavily concentrated in the West End of London. In order to control for this concentration, this section analyses the performance of listed and unlisted offices in three broad areas. The comparison at the national level at the end of the section must be treated with a degree of caution, because the apparent differences may be as much a function of variations between the West End and other locations, as they are a genuine reflection of the differences between listed and unlisted offices. A comprehensive set of performance data which is presented in Appendix I. The differences between the listed and unlisted office populations do not look like there are statistically significantly different, this has been formally tested in Appendix II.

4.1 West End Offices

The West End has by far the largest concentration of listed buildings in investment portfolios accounting for 61% of the total capital value of the IPD sample at the end of 2004. Figure 7 compares the total returns on listed and unlisted offices in the West End in 2004 and also details the components of performance: income return, capital growth, rental growth, the impact of movements on equivalent yields on capital values and the residual. (See glossary for further information).

Figure 7: The Performance of Listed and Unlisted Offices in the West End in 2004



- Listed offices in the West End performed strongly in 2004 with total returns of 16.7%. The main momentum came from a recovery in capital values, which rose by 10.1%. The rate of income return was 6.1%.
- The upturn in capital values was due primarily to a favourable fall in equivalent yields as listed offices in the West End benefited from the general decline in yields across the UK (Section 2). The equivalent yield fell by 60 basis points to 6.6% during 2004, lifting capital values by 9.7%. In addition, rental values rose by 2.1%, although this had little immediate impact on capital values due to widespread over-renting. (Note the residual in Figure 5 is the mirror image of the increase in rental values).
- Although listed offices performed strongly last year, total returns were slightly lower than on unlisted offices at 17.8%. Unlisted offices saw a fractionally larger fall in

equivalent yields of 70 basis points and they also gained from a higher rate of income return (6.5%).

Figure 8: West End Office Performance Returns 1980-2004

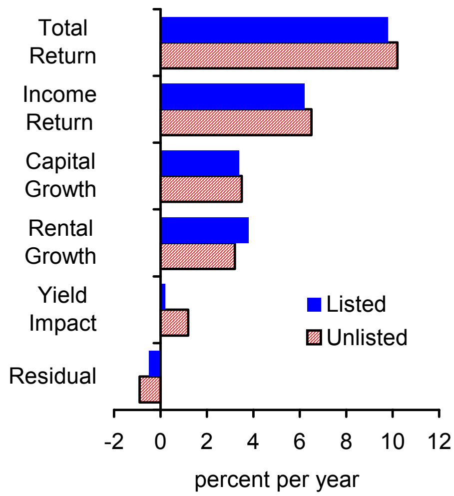


Figure 9: West End Office Total

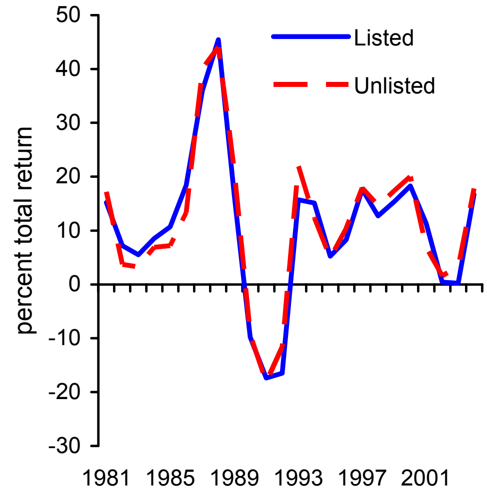


Figure 10: West End Office Rental Growth

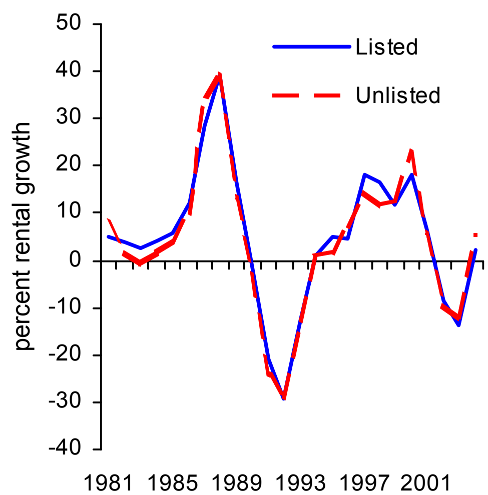


Figure 11: West End Office Equivalent Yields

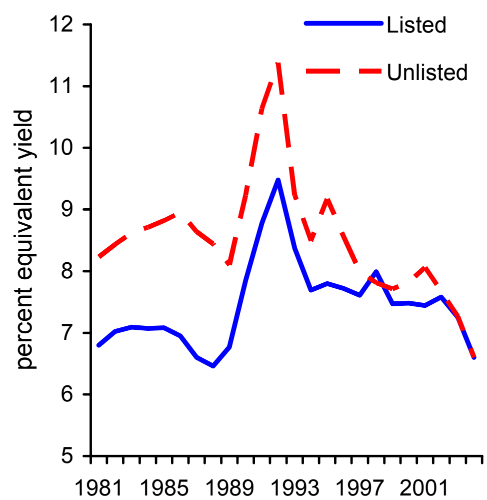


Table 4: West End Office Performance, percent per year

	2004		1999-2004		1980-2004	
	Listed	**Unlisted**	**Listed**	**Unlisted**	**Listed**	**Unlisted**
Total Return	16.7	17.8	9.1	9.6	9.8	10.2
Income Return	6.1	6.5	6.2	6.3	6.2	6.5
Capital Growth	10.1	10.6	2.7	3.1	3.4	3.5
Rental Growth	2.1	5.3	0.3	1.8	3.8	3.2
Yield Impact	9.7	10.1	2.5	3.2	0.2	1.2
Residual	-2.0	-5.3	0.0	-1.8	-0.5	-0.9
Standard Deviation in Total Returns	-	-	-	-	13.9	14.1
Beta Coefficient vs UK All Property	-	-	-	-	1.5	1.6

Table 4 and Figures 8-11 put last year in context by showing the long-term performance history of listed and unlisted offices in the West End since the start of IPD's record in 1980.

- In general the performance of listed buildings has been very similar to that of unlisted offices in the West End and they have followed the same market cycle, with simultaneous peaks and troughs.
- Total returns on listed offices averaged 9.8% per year between 1980 and 2004, against 10.2% per year on unlisted offices. The standard deviation in annual returns on listed and unlisted offices has been virtually identical at 13.9% and 14.1%, indicating similar levels of risk.
- The main factor behind the slight under-performance of listed offices is that they have not seen the same favourable downward movement in yields over the long-term as the wider West End market (Figure 9.) In the 1980's the average equivalent yield on listed offices was around 150 basis points lower than the West End average. However, the gap shrunk rapidly in the first half of the 1990's and disappeared completely in 2004.
- The negative re-rating of listed offices from prime to average investment grade suggests that investors no longer expect them to achieve superior growth. During the 1980's rental growth on listed offices (11.1% per year) exceeded that on unlisted offices (10.2% per year), but the gap narrowed during the 1990's and unlisted offices saw marginally faster rental growth over the last five years.
- Old unlisted offices in the West End did not suffer the same negative re-rating during the 1990's, possibly because their yields were always above the West End average.
- Arguably, the unfavourable re-rating of listed offices in the West End from prime to average investment grade may be linked to a change in occupier behaviour, with office occupiers increasingly giving more priority to building specification than to a prestigious address.

4.2 City and Mid-Town Offices

IPD has identified a sample of 47 listed offices in the City and Mid-Town which were held in investment portfolios at the end of 2004. Figure 12 compares the total returns on listed and unlisted offices in the City and Mid-Town in 2004.

Figure 12: The Performance of Listed and Unlisted Offices in City & Mid-Town - 2004

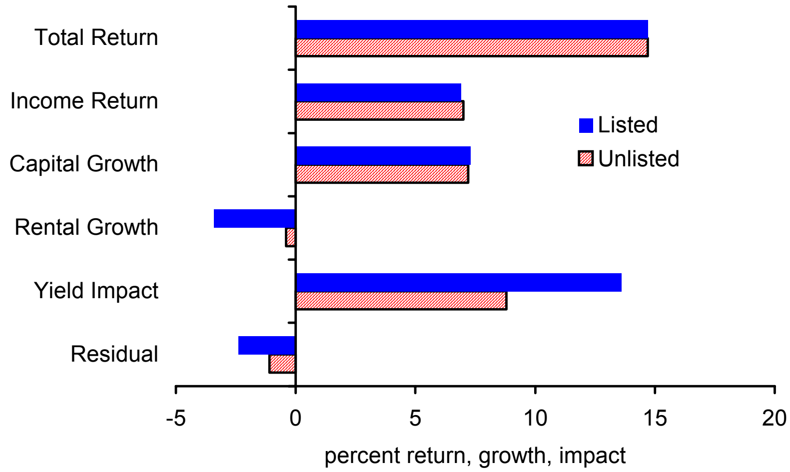


Figure 13: City & Mid-Town Office Performance 1980-2004

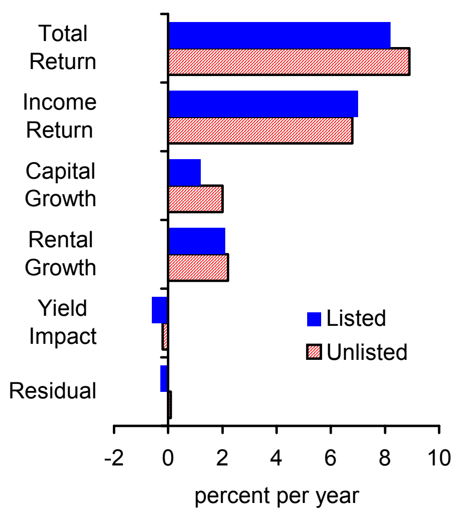


Figure 14: City & Mid-Town Office Total Returns

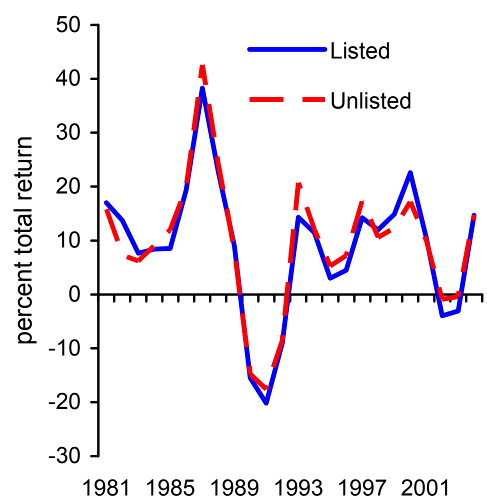


Figure 15: City & Mid-Town Office Rental Growth

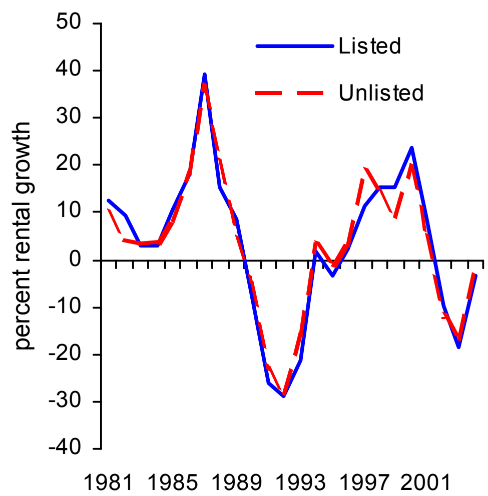


Figure 16: City & Mid-Town Office Equivalent Yields

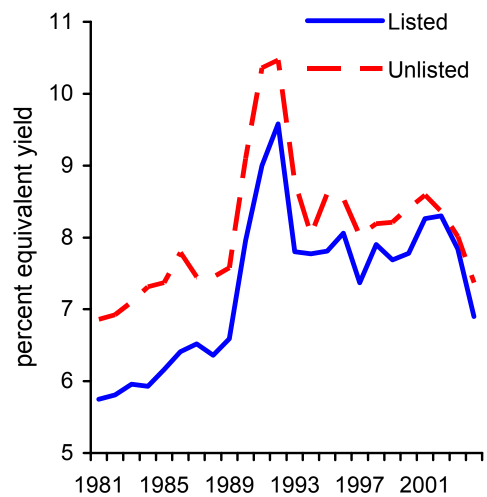


Table 5: City and Mid-Town Office Performance, percent per year

	2004		1999-2004		1980-2004	
	Listed	**Unlisted**	**Listed**	**Unlisted**	**Listed**	**Unlisted**
Total Return	14.7	14.7	7.7	7.9	8.2	8.9
Income Return	6.9	7.0	7.8	7.2	7.0	6.8
Capital Growth	7.3	7.2	-0.1	0.7	1.2	2.0
Rental Growth	-3.4	-0.4	-0.9	-1.8	2.1	2.2
Yield Impact	13.6	8.8	2.2	2.2	-0.6	-0.2
Residual	-2.4	-1.1	-1.4	0.3	-0.3	0.1
Standard Deviation in Total Returns	-	-	-	-	12.7	12.6
Beta Coefficient vs UK All Property	-	-	-	-	1.2	1.3

- Listed offices in the City and Mid-Town achieved total returns of 14.7% in 2004. The total return was split almost equally between the rate of income return at 6.9% and an increase in capital values of 7.3%.
- Last year's rise in capital values depended entirely upon a favourable fall in yields, as listed offices in the City and Mid-Town benefited from the widespread decline in UK property yields. The equivalent yield on listed offices in the City and Mid-Town fell by 90 basis points during 2004 to 6.9% at the year-end, boosting capital values by 13.6%.
- Rental values on listed offices in the City and Mid-Town fell by a further –3.4% in 2004, although this was a considerable improvement on the –18.4% drop suffered in 2003.
- The performance of listed offices exactly matched that of unlisted offices in the City and Mid-Town in 2004. While rental values on unlisted offices almost stabilised last year, falling by just –0.4%, unlisted offices paradoxically saw a smaller fall in equivalent yields (60 basis points) than listed offices.

Table 5 and Figures 13-16 show the long-term performance history of listed and unlisted offices in the City and Mid-Town since 1980. There are certain parallels between the performance of listed offices in the City and Mid-Town and listed offices in the West End.

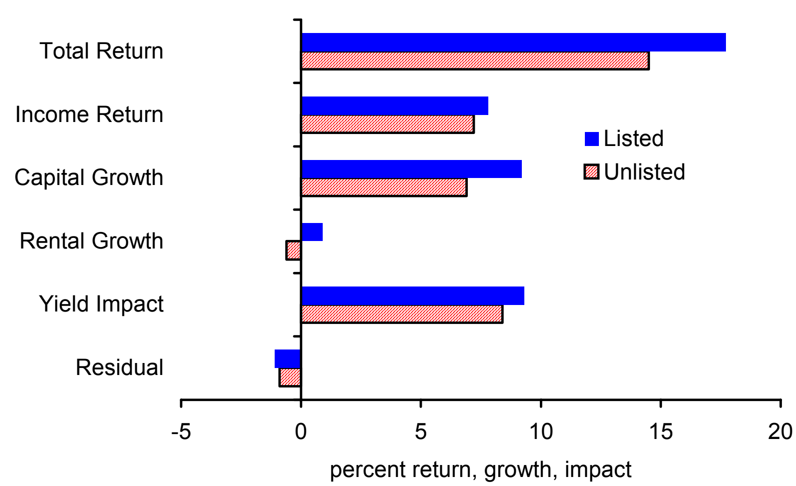
- Although there are subtle differences, listed offices in the City and Mid-Town have followed the same cycle as unlisted offices. The level of risk on the two office types, as measured by the standard deviation in returns, has been virtually identical at 12.6-12.7%.

- Listed offices in the City and Mid-Town have under-performed unlisted offices over the long-term, with total returns of 8.2% and 8.9% per year, respectively since 1980. Periods when listed offices slightly out-performed in the early 1980's and between 1998 and 2001 have been offset by periods when they lagged behind in 1984-1988, 1992-1997 and 2002-2003.
- These short-term variations in the relative fortunes of listed offices can largely be explained by differences in rental growth. Listed offices saw stronger rental growth than unlisted offices in the early 1980's and between 1998-2001, but consistently weaker rental growth between 1992 and 1997. Long-term rental growth on the two types has been indistinguishable at 2.1-2.2% per year.
- In common with the West End, the under-performance of listed offices in the City and Mid-Town over the long-term has been due to a negative re-rating of their yields. While the equivalent yield on listed offices is still below the average for unlisted offices, the gap has halved since the late 1980's. This implies that although investors continue to anticipate faster rental growth on listed offices, the expected margin has decreased.
- Despite lower yields, listed offices in the City and Mid-Town have had a slightly higher rate of income return (7.0% per year) over the long-term than unlisted offices (6.8% per year). The difference indicates that listed offices have historically had a lower level of voids than unlisted offices, probably because the unlisted sample includes recently completed developments.

4.3 Outer London, Southern England and Rest of England

Outside Central London, the sample of listed offices held in investment portfolios is quite limited. IPD has identified a sample of 41 from its records. Unfortunately this sample is too thin to compile reliable performance data for each of the three main constituent regions: Outer London, Southern England and the Rest of England. IPD has therefore compiled aggregated series for listed and unlisted offices in the three broad regions. It must be borne in mind that the listed sample outside Central London is heavily weighted towards the Rest of England, whereas the set of unlisted offices is dominated by Outer London and Southern England (Section 3). Figure 17 compares the total returns on listed and unlisted offices outside Central London in 2004.

Figure 17: The Performance of Listed & Unlisted Offices Outside Cen. London - 2004



- The regions outside Central London saw the best performance by listed offices in 2004. Total returns of 17.7% reflected a relatively high income return of 7.8% and a 9.2% increase in capital values.
- The increase in capital values was driven by a favourable fall in yields. The average equivalent yield on listed offices in Outer London, Southern England and the Rest of England fell by 70 basis points during 2004 to 7.6% at the year-end, lifting capital values by 9.3%.
- Rental values on listed offices outside Central London have been stable since the end of 2001. Last year saw a marginal increase of 0.9%.
- Listed offices outside Central London out-performed unlisted offices, in contrast to the relative performance of the two types in the West End. Total returns on unlisted offices were significantly lower at 14.5%, partly because they saw a smaller fall in yields of 65 basis points and partly because they suffered a small drop in rental values of –0.6%. Last year was the third in succession that rental values fell on unlisted offices outside Central London, primarily because of the weak state of the M4 / M25 market.

Table 6 and Figures 18-21 show the long-term performance history of listed and unlisted offices outside Central London since 1980. It should be noted that the listed sample outside Central London is heavily weighted towards the Rest of England, whereas the set of unlisted offices is dominated by Outer London and Southern England. Accordingly, Figures 19-21 also chart the performance of the overall Rest of England office market (the dotted line) to provide a reference point.

- Listed offices in Outer London, Southern England and the Rest of England have out-performed unlisted offices over the long-term, with total returns of 9.2% and 8.7% per year, respectively since 1980.
- Listed offices outside Central London appear to have carried a slightly higher level of risk than unlisted offices. The long term standard deviations in returns on the two types have been 8.9% and 8.0%, respectively. Most of the difference is due to the higher peak in returns on listed offices in 1988.
- Superficially, the performances of listed and unlisted offices outside Central London have become increasingly divergent over the last ten years. A period of consistent under-performance between 1995-1998 was followed by a period of sustained out-performance by listed buildings between 2001-2004.

Figure 18: Outside Central London Office Performance 1980-2004

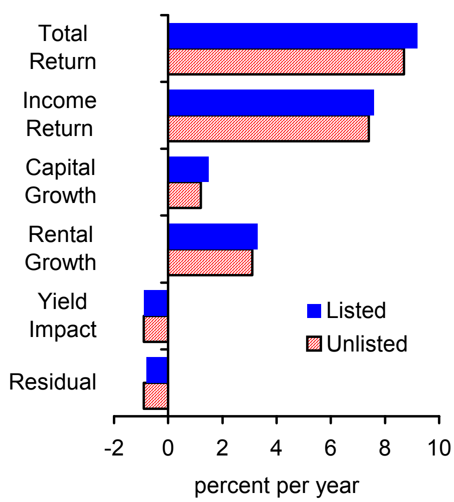


Figure 19: Outside Central London Office Total Returns

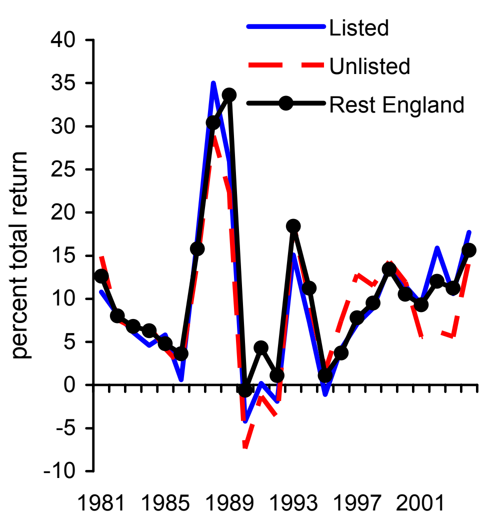


Figure 20: Outside Central London Office Rental Growth

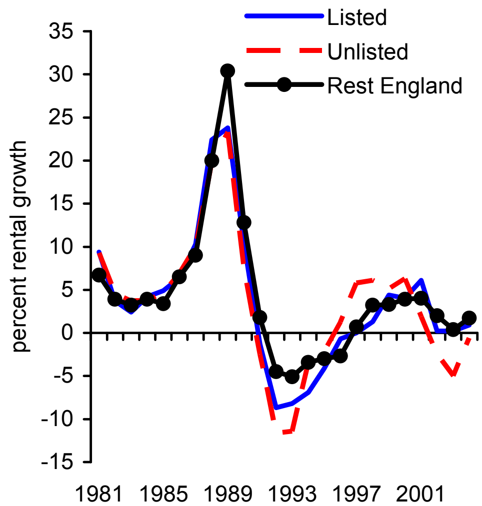


Figure 21: Outside Central London Office Equivalent Yields

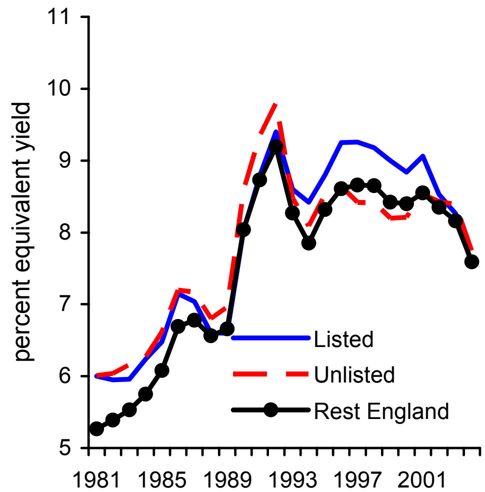


Table 6: Outside Central London Office Performance, percent per year

	2004		1999-2004		1980-2004	
	Listed	**Unlisted**	**Listed**	**Unlisted**	**Listed**	**Unlisted**
Total Return	17.7	14.5	13.0	8.7	9.2	8.7
Income Return	7.8	7.2	8.2	7.6	7.6	7.4
Capital Growth	9.2	6.9	4.5	1.0	1.5	1.2
Rental Growth	0.9	-0.6	2.2	-0.1	3.3	3.1
Yield Impact	9.3	8.4	3.6	1.2	-0.9	-0.9
Residual	-1.1	-0.9	-1.4	-0.1	-0.8	-0.9
Standard Deviation in Total Returns	-	-	-	-	8.9	8.2
Beta Coefficient vs UK All Property	-	-	-	-	0.9	0.9

- However, most of this divergence appears to be due to the bias of listed offices towards the Rest of England office market, compared with unlisted offices. This regional bias also largely explains the recent stability of listed office rental values.
- One key difference between listed offices outside Central London and those inside is that the former never appear to have been priced as prime assets in their local investment markets. The average equivalent yields on listed offices in Southern England and the Rest of England were broadly on a par with those on unlisted offices through most of the 1980's and the first half of the 1990's and they were consistently higher through the second half of the 1990's by 50-75 basis points. The difference is not explained by the bias of listed offices towards the Rest of England office market.
- This difference in pricing and the lack of a negative relative re-rating in yields like that in Central London is one of the main reasons why listed offices in Southern England and the Rest of England have out-performed unlisted offices since 1980.

4.4 England

Table 7 and Figures 22-23 compare the performance of listed and unlisted offices. The data appear to show that listed offices out-performed unlisted offices in 2004 and that over the long-term the performance of the two types has been identical. However, as the preceding analysis demonstrates this comparison is misleading because the regional composition of the two samples is very different. Listed offices are heavily concentrated in the West End of London, which has been one of the best performing office locations.

Figure 22: Office Performance 1980-2004

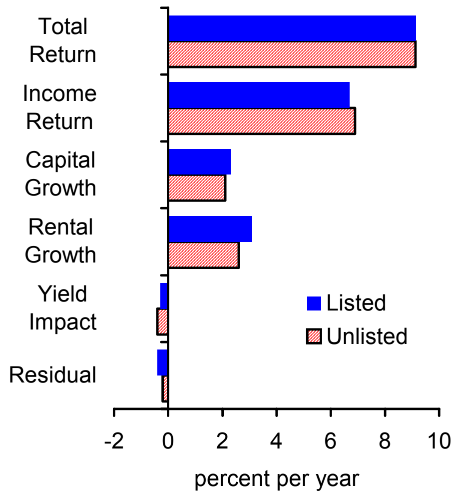


Figure 23: Office Total Returns

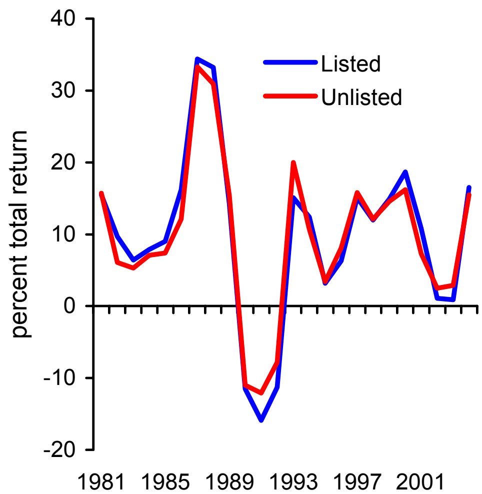
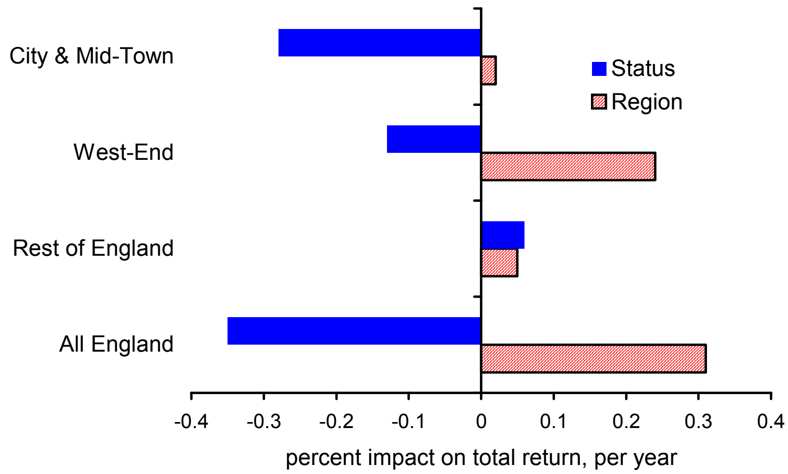


Table 7: England Office Performance, percent per year

	2004		1999-2004		1980-2004	
	Listed	**Unlisted**	**Listed**	**Unlisted**	**Listed**	**Unlisted**
Total Return	16.5	15.5	9.4	8.7	9.1	9.1
Income Return	6.6	7.0	6.9	7.1	6.7	6.9
Capital Growth	9.4	8.0	2.3	1.5	2.3	2.1
Rental Growth	0.5	0.4	0.3	-0.2	3.1	2.6
Yield Impact	11.2	9.2	2.6	1.9	-0.3	-0.4
Residual	-2.4	-1.6	-0.7	-0.2	-0.4	-0.2
Standard Deviation in Total Returns	-	-	-	-	11.9	10.9
Beta Coefficient vs UK All Property	-	-	-	-	1.3	1.2

Figure 24 presents the results of an attribution analysis to separate out the influence of region and status on the long-term performance of listed offices at the national level. The analysis uses unlisted offices as a benchmark and quantifies the extent to which listed offices have benefited or been handicapped by their status and to what extent they have gained or lost from their location. A bar to the right indicates that status, or broad region has been an advantage: a bar to the left indicates that it has been a disadvantage.

Figure 24: Attribution of the Performance of Listed Offices Relative to Unlisted Offices, 1980- 2004



- At a national level the impacts of status and region on the performance of listed buildings have cancelled each other out over the long-term.
- The impact of status has been marginally negative, with listed offices in England under-performing unlisted offices by an average of –0.35% per year. While listed status appears to have had a small positive impact in Southern England and the Rest of England, it appears to have had a negative impact in Central London. Most of the under-performance of listed offices has been due to a less favourable movement in yields over the long-term.
- The negative impact of status has been masked at the national level, however, by regional factors which have added approximately 0.3% per year to returns. The concentration of listed buildings in the West End, one of the best-performing office markets in the UK over the long-term, has enhanced their performance and their low exposure to the weaker markets of the City and Southern England has also been beneficial.

Conclusions

- Listed offices under-performed unlisted offices in the West End in 2004. In the City and Mid-Town total returns on listed and unlisted offices were identical in 2004, while outside Central London, listed offices out-performed unlisted offices by quite a margin.
- Over the long-term, listed offices have tended to follow the same market cycle as unlisted offices with simultaneous peaks and troughs. Differences in the volatility of returns between the two types have been insignificant, indicating similar levels of risk.
- In the City and West End total returns on listed offices ran slightly below those on unlisted offices between 1980-2004. While rental growth on listed offices matched or exceeded that on unlisted offices, yields on listed offices have tended to rise relative to those on unlisted offices, suggesting that listed offices have lost some of their former prime status over the long-term.
- Outside Central London, total returns on listed offices ran slightly ahead of those on unlisted offices between 1980-2004. Rental growth on listed offices has matched that on unlisted offices and listed offices have not suffered the negative yield re-rating seen

in Central London, possibly because equivalent yields were never below those on unlisted offices.

- Although the long-term performance of listed and unlisted offices appears to have been identical at the national level, the comparison is misleading because listed offices are heavily concentrated in the West End. Overall, listed offices have under-performed unlisted offices by around 0.3% per year, but this has been masked by the strong performance of the West End office market.

5. Income and Occupancy at End-2004

This section considers the potential for changes in the rental income received by property owners, based on differences between rental values and the rent paid by tenants at the end of 2004. The analysis does not assume any subsequent changes in rental values and therefore, arguably, offers a cautious view of the prospects for income growth.

Table 8: Income Prospects at end-2004

	London		Southern & Rest of England		All England	
	Listed	**Unlisted**	**Listed**	**Unlisted**	**Listed**	**Unlisted**
Percent of Units						
Reversionary	38	42	58	51	41	46
Over-rented	40	42	34	34	39	38
Void	23	16	8	15	20	15
Percent of Current Rental Income						
Uplift on Reversions [1]	24	11	3	4	20	8
Over-Rented Top Slice [2]	10	15	8	9	10	13
Void ERV	34	14	6	14	29	14
Index, Current Rental Income = 100						
Reversionary Potential Index [3]	114	96	96	95	110	96

1. Uplift = ERV-Rent Passing as % of Rent Passing on All Properties.
2. Top-Slice = Rent Passing-ERV as % of Rent Passing on All Properties.
3. Reversionary Potential Index shows the potential change in overall income, if all leases were immediately re-let at ERV. An Index of 100 indicates that the uplift on reversions and the over-rented top-slice are exactly equal and are offsetting each other. The Index ignores voids.

Although conditions in the office market have stabilised following the downturn between 2001-2003, vacancy rates remain at historically high levels. In addition, a large proportion of leases are over-rented, such that the rent currently being paid by the tenant is higher than the open market rental value (ERV). This means that potentially the landlord will suffer a drop in rental income when the current lease expires, even if the unit is re-let immediately.

The comparison of listed and unlisted offices in London at the end of 2004 shows that:

- The void rate in listed offices was significantly higher than in unlisted offices, measured by both the number of units (23%) and by rental value (34%). The difference between the two measures of voids in listed offices suggests that larger, more valuable units had a higher void rate than smaller, less valuable units.
- The incidence of over-renting in listed offices was similar to that in the rest of the London office market.
- Although there was little difference between listed and unlisted offices in the proportion of leases which were reversionary at the end of 2004 (i.e. current rent exceeds ERV), the value of the reversions on listed offices was significantly higher. The relatively high value of reversions on listed offices, at 24% of current income, reflects historic leases where the interval between rent reviews is much longer than the five year pattern common in unlisted offices.

- On balance the prospects for income growth on listed offices are stronger than those on unlisted offices, due to the higher value of reversions.

The comparison of listed and unlisted offices in Southern and the Rest of England at the end of 2004 shows that:

- By contrast with London, the void rate on listed offices outside London was significantly lower than that on unlisted offices. Part of the difference compared with unlisted offices may be explained by the bias of listed offices towards the Rest of England where void rates were generally lower than in Southern England.
- Despite a more benign rental trend in recent years in the Rest of England, there was little to distinguish between listed and unlisted offices in terms of the degree of over-renting and the level of reversions at the end of 2004. The similarity in the level of reversions suggests that historic leases are rarer in listed offices in Southern and the Rest of England than in London.
- On balance the prospects for income growth on listed offices in Southern and the Rest of England are very similar to those for unlisted offices. Both sets of offices would suffer a drop in income of 4-5% if all units were re-let immediately at current rental values.

6. Improvement Expenditure

The performance series in Section 4 reflect both the costs of improvement expenditure borne by the landlord and the possible benefits, in terms of enhanced capital values. Table 9 compares the rate of improvement expenditure as a percentage of capital value on listed and unlisted offices over the last five, ten and 22 years. The improvement expenditure recorded by IPD covers all the irrecoverable expenditure incurred by landlords and consists primarily of spending on refurbishment projects. (The series also includes any other capital injections, such as buying in the freehold on leasehold properties). IPD's improvement expenditure does not include any repairs and maintenance costs borne by tenants, either directly, or recovered via service charges and dilapidation payments. It also excludes expenditure on re-development projects where the original building is either partially, or completely demolished.

Table 9: Improvement Expenditure

	London		**Southern & Rest of England**		**All England**	
	Listed	**Unlisted**	**Listed**	**Unlisted**	**Listed**	**Unlisted**
Improvement Expenditure as % of Capital Value						
2000-2004	0.6	1.1	0.9	1.1	0.6	1.1
1995-2004	0.6	1.0	0.6	0.9	0.6	0.9
1982-2004	0.8	1.0	0.7	0.9	0.8	0.9

Perhaps contrary to expectations, the data reveals that investors in listed offices have incurred lower refurbishment costs over the medium and long-term than investors in more modern, unlisted offices. The finding suggests that investors in listed offices have not had to spend more on refurbishment, in order to attract and retain tenants.

Glossary

English Heritage Definition of Listed Status

*"*A listed building is one which is protected under the Planning (Listed Buildings and Conservation Areas) Act 1990 because of its special architectural or historic interest. A listed building will include the building itself; any object or structure which is either fixed to the building or which is in the curtilage, forms part of the land and has done so since before 1st July1948. Listed building consent is needed for any works for the demolition of a listed building or any works affecting its character as a building of special architectural or historic interest. In addition in considering development which affects a listed building or its setting the lpa must have special regard to the desirability of preserving the building, its setting or any features of special architectural or historic interest. In June 2004 DCMS published the Government's proposal for reforming the legislation which protects the historic environment. Many of the reforms will require primary legislation.*"*

For further information, please refer to PPG 15 and the Planning (Listed Buildings and Conservation Areas) Act 1990.

IPD Performance Measures

Beta Coefficient
The beta coefficient is the slope of the line measuring the relationship between total returns in a segment and returns on the UK market as a whole. A beta coefficient above one indicates a relatively volatile segment which experiences more extreme upswings and downswings than the market overall. A beta coefficient below one denotes a relatively stable segment.

Capital Growth
Capital growth is the change in the capital value of a property over 12 months net of capital expenditure, expressed as a percentage of the capital employed over the year. The capital value of a property is in the view of the valuer, the price the property would achieve on the open market. On a rack-rented or reversionary property capital growth is roughly equal to the product of Rental Growth and the Yield Impact.

Equivalent Yield on Portfolio at Year End
The equivalent yield is the rate at which the prospective rental income over the entire length of a lease is discounted to equate with the current capital value.

Equivalent Yield Movement Index
The Equivalent Yield Movement Index is designed to capture market movements in equivalent yields. It adjusts for changes in the Year End yield series caused by changes in the sample of properties covered by the IPD due to trading and development. Movements in the equivalent yield may reflect shifts in investor sentiment and are influenced both by changes in rental growth expectations and by swings in the flow of capital being invested in property

Income Return
The rate of income return is the rent actually paid by a tenant over 12 months, divided by the capital employed in the property. The income measure is net of any revenue expenditure incurred by the landlord, including incentives.

Rental Growth
Rental growth is the percentage change in the Estimated Rental Value of a property over 12 months. The ERV is the open market rent which in the view of the valuer could be charged for a property. It may be quite different from the rent currently paid by the incumbent tenant.

Over-Renting and Reversions
Over-renting occurs when the open market rental value falls below the rent actually paid by the incumbent tenant. Between 1991 and 1993 and again in 2002-2003 it cushioned the impact on capital values of falling rental values, as valuers focused increasingly on the income protected by the lease. Correspondingly, between 1997 and 1999 it tended to detract from performance, because a significant proportion of the increase in rental values had no immediate impact on the future income stream and on capital values. In addition, because valuers have introduced a second yield to value the `top-slice' of over-rented rental income, the condition has made equivalent yields more sensitive to fluctuations in gilts yields.

A reversionary property is one where the open market rental value exceeds the rent paid; a rack-rented property is where the two are equal.

Total Return
The total return is the product of Capital Growth and the Rate of Income Return.

Yield Impact
The Yield Impact shows the percentage impact on capital values of market movements in yields. It is calculated as the change in the equivalent yield over 12 months divided by the yield at the end of the year, with the sign reversed to show the impact on capital values.

Appendices

Appendix I		1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	3 year	5 year	10 year	24 year
Total Return (%pa)																													
Listed	City & Mid-Town	17.0	13.7	7.6	8.4	8.5	19.4	38.3	22.7	9.0	-15.5	-20.2	-9.1	14.3	11.5	3.0	4.5	14.2	12.0	14.9	22.6	10.6	-4.0	-3.1	14.7	2.2	7.7	8.6	8.2
	West-End	15.2	7.2	5.5	8.5	10.7	18.4	36.0	45.5	16.4	-9.8	-17.4	-16.5	15.7	15.1	5.2	8.3	17.7	12.7	15.4	18.3	11.3	0.4	0.2	16.7	5.5	9.1	10.4	9.8
	All London	16.1	9.9	6.4	8.4	9.5	18.6	37.2	33.0	12.8	-12.5	-18.5	-13.1	15.1	13.5	4.1	6.7	16.6	12.5	15.2	19.7	11.0	-1.0	-0.7	16.3	4.5	8.7	9.8	9.1
	Rest of England	10.8	8.2	6.1	4.6	5.8	0.6	16.9	35.0	25.9	-4.2	0.2	-1.9	15.1	7.3	-1.1	4.2	7.1	8.9	13.7	11.5	9.4	15.9	10.6	17.7	14.7	13.0	9.7	9.2
	All England	*15.5*	*9.7*	*6.4*	*7.9*	*9.0*	*16.2*	*34.4*	*33.2*	*14.2*	*-11.5*	*-15.9*	*-11.3*	*15.1*	*12.4*	*3.2*	*6.3*	*15.1*	*12.0*	*14.9*	*18.7*	*10.8*	*1.1*	*0.9*	*16.5*	*5.9*	*9.4*	*9.8*	*9.1*
Unlisted	City & Mid-Town	15.8	7.3	6.2	9.0	11.9	19.8	42.6	24.1	8.3	-14.8	-17.6	-8.7	20.7	12.0	5.2	7.2	17.3	10.6	12.4	17.2	10.0	-0.9	-0.4	14.7	4.3	7.9	9.2	8.9
	West-End	17.2	3.7	3.2	6.9	7.2	13.3	40.0	44.1	21.2	-9.5	-18.3	-11.7	21.9	12.3	4.9	10.4	17.9	14.6	17.4	20.0	6.9	1.6	3.2	17.8	7.3	9.6	11.3	10.2
	All London	15.9	5.7	5.0	7.1	8.4	15.0	38.6	31.4	13.6	-12.2	-16.0	-9.6	20.5	11.2	4.4	8.4	17.5	12.4	14.8	18.4	8.2	0.7	1.5	16.2	5.9	8.7	10.1	9.2
	Rest of England	14.9	7.6	6.6	6.8	4.2	2.2	14.5	28.9	22.3	-7.4	-1.3	-3.8	18.8	9.8	1.6	7.4	12.8	11.5	14.3	11.9	5.6	6.2	5.6	14.5	8.7	8.7	9.1	8.7
	All England	*15.7*	*6.1*	*5.3*	*7.1*	*7.4*	*12.1*	*33.3*	*30.9*	*15.4*	*-11.0*	*-12.1*	*-7.8*	*20.0*	*10.7*	*3.4*	*8.1*	*15.8*	*12.1*	*14.6*	*16.2*	*7.3*	*2.5*	*2.9*	*15.5*	*6.8*	*8.7*	*9.7*	*9.1*
Income Return (%pa)																													
Listed	City & Mid-Town	4.6	4.7	4.9	5.3	5.5	5.3	5.1	4.9	5.0	6.0	8.2	9.6	10.1	8.3	9.1	8.5	8.6	7.9	7.1	8.2	7.3	8.2	8.5	6.9	7.9	7.8	8.0	7.0
	West-End	5.3	5.7	5.7	6.3	6.3	6.0	5.4	4.4	4.1	5.0	6.6	8.5	9.2	7.6	7.2	6.8	6.3	6.2	6.2	5.9	6.3	6.2	6.6	6.1	6.3	6.2	6.4	6.2
	All London	5.0	5.3	5.4	5.9	5.9	5.7	5.3	4.7	4.5	5.5	7.4	9.0	9.7	8.0	8.1	7.6	7.1	6.8	6.4	6.7	6.7	6.9	7.2	6.3	6.8	6.8	7.0	6.5
	Rest of England	5.6	5.9	6.2	6.3	6.8	6.5	7.0	6.1	5.6	5.8	7.4	9.0	9.9	8.5	8.5	9.0	8.9	8.7	8.8	8.4	8.6	8.3	7.8	7.8	8.0	8.2	8.5	7.6
	All England	*5.1*	*5.4*	*5.5*	*5.9*	*6.0*	*5.8*	*5.5*	*4.8*	*4.7*	*5.5*	*7.4*	*9.0*	*9.7*	*8.1*	*8.2*	*7.8*	*7.4*	*7.1*	*6.8*	*6.9*	*6.9*	*7.1*	*7.3*	*6.6*	*7.0*	*6.9*	*7.2*	*6.7*
Unlisted	City & Mid-Town	5.1	5.1	5.4	6.0	6.0	5.9	5.1	4.7	5.0	6.1	7.9	9.2	9.6	8.0	7.8	8.1	7.7	7.0	7.0	7.2	6.7	7.1	7.8	7.0	7.3	7.2	7.3	6.8
	West-End	5.2	5.3	5.4	5.9	6.4	6.4	6.0	5.1	4.4	5.1	7.3	9.3	9.8	7.9	7.4	7.5	7.1	6.5	6.3	5.9	5.9	6.3	6.9	6.5	6.6	6.3	6.6	6.5
	All London	5.2	5.2	5.5	6.0	6.1	6.2	5.6	5.0	4.9	5.8	7.7	9.2	9.6	8.1	7.9	8.1	7.7	7.0	6.9	6.7	6.5	6.8	7.4	6.9	7.1	6.9	7.2	6.7
	Rest of England	5.6	5.5	5.8	6.2	6.5	6.9	7.2	6.9	5.9	6.4	7.8	8.5	9.3	8.2	8.6	8.9	8.7	8.3	7.9	7.6	7.7	7.8	7.7	7.2	7.6	7.6	8.1	7.4
	All England	*5.3*	*5.3*	*5.6*	*6.0*	*6.2*	*6.4*	*6.0*	*5.4*	*5.1*	*5.9*	*7.7*	*8.9*	*9.5*	*8.1*	*8.1*	*8.4*	*8.0*	*7.5*	*7.3*	*7.0*	*6.9*	*7.2*	*7.5*	*7.0*	*7.2*	*7.1*	*7.5*	*6.9*
Capital Growth (%pa)																													
Listed	City & Mid-Town	12.0	8.7	2.6	2.9	2.8	13.4	31.7	17.1	3.9	-20.4	-26.4	-17.2	3.9	3.0	-5.6	-3.7	5.2	3.8	7.3	13.3	3.2	-11.3	-10.8	7.3	-5.3	-0.1	0.6	1.2
	West-End	9.5	1.4	-0.3	2.0	4.2	11.8	29.2	39.5	11.8	-14.1	-22.6	-23.1	6.0	7.0	-2.0	1.4	10.7	6.2	8.7	11.8	4.7	-5.5	-6.0	10.1	-0.8	2.7	3.8	3.4
	All London	10.6	4.4	1.0	2.4	3.4	12.3	30.4	27.2	7.9	-17.1	-24.2	-20.4	5.0	5.1	-3.8	-0.8	8.9	5.5	8.2	12.2	4.1	-7.5	-7.4	9.4	-2.1	1.8	2.7	2.4
	Rest of England	5.0	2.1	-0.1	-1.6	-1.0	-5.7	9.3	27.4	19.4	-9.5	-6.7	-10.1	4.8	-1.1	-8.9	-4.5	-1.7	0.1	4.5	2.9	0.7	7.1	2.6	9.2	6.3	4.5	1.1	1.5
	All England	*9.9*	*4.1*	*0.9*	*1.9*	*2.8*	*9.9*	*27.6*	*27.2*	*9.1*	*-16.2*	*-21.8*	*-18.7*	*5.0*	*4.0*	*-4.7*	*-1.4*	*7.2*	*4.6*	*7.7*	*11.1*	*3.7*	*-5.6*	*-6.0*	*9.4*	*-1.0*	*2.3*	*2.4*	*2.3*
Unlisted	City & Mid-Town	10.3	2.1	0.7	2.9	5.6	13.1	35.8	18.7	3.2	-19.7	-23.8	-16.5	10.2	3.7	-2.4	-0.8	9.0	3.4	5.1	9.4	3.1	-7.5	-7.6	7.2	-2.8	0.7	1.7	2.0
	West-End	11.5	-1.5	-2.1	0.9	0.8	6.5	32.3	37.4	16.1	-14.0	-24.0	-19.3	11.1	4.1	-2.4	2.7	10.2	7.6	10.5	13.4	1.0	-4.4	-3.5	10.6	0.7	3.1	4.4	3.5
	All London	10.2	0.4	-0.5	1.1	2.2	8.3	31.3	25.2	8.3	-17.1	-22.1	-17.3	10.0	2.9	-3.3	0.3	9.2	5.1	7.4	11.0	1.6	-5.8	-5.6	8.7	-1.1	1.7	2.7	2.3
	Rest of England	8.9	2.0	0.7	0.6	-2.2	-4.3	6.9	20.7	15.6	-13.1	-8.5	-11.3	8.8	1.5	-6.4	-1.4	3.8	3.0	5.9	4.0	-2.0	-1.5	-2.0	6.9	1.1	1.0	1.0	1.2
	All England	*9.9*	*0.8*	*-0.2*	*1.0*	*1.2*	*5.4*	*25.9*	*24.3*	*9.8*	*-16.1*	*-18.5*	*-15.4*	*9.6*	*2.4*	*-4.4*	*-0.3*	*7.2*	*4.3*	*6.9*	*8.6*	*0.4*	*-4.4*	*-4.3*	*8.0*	*-0.4*	*1.5*	*2.1*	*2.1*
Rental Value Growth (%pa)																													
Listed	City & Mid-Town	12.6	9.4	3.2	3.1	10.6	18.3	39.2	15.4	8.5	-7.4	-25.9	-28.8	-21.4	1.8	-3.5	2.1	11.4	15.4	15.3	23.8	8.5	-9.6	-18.4	-3.4	-10.7	-0.9	3.4	2.1
	West-End	5.1	3.9	2.7	4.3	5.7	12.1	28.3	39.3	16.7	-0.7	-20.7	-29.2	-12.6	1.1	4.9	4.7	18.1	16.6	11.6	18.3	6.5	-8.6	-13.9	2.1	-7.0	0.3	5.5	3.8
	All London	8.5	6.1	3.2	3.8	8.0	15.2	33.9	25.3	12.3	-4.3	-23.2	-29.1	-16.7	1.5	0.7	3.3	15.7	16.2	12.5	20.2	7.1	-9.0	-15.2	0.4	-8.1	0.0	4.6	2.9
	Rest of England	9.4	3.7	2.4	4.2	4.9	6.4	10.3	22.4	23.8	10.5	-1.3	-8.7	-8.2	-6.9	-4.1	-0.7	0.0	1.3	4.4	4.0	6.1	0.2	0.2	0.9	0.4	2.2	1.2	3.3
	All England	*8.6*	*5.8*	*3.1*	*3.8*	*7.6*	*14.0*	*30.7*	*24.9*	*13.6*	*-2.4*	*-19.8*	*-25.3*	*-14.8*	*-0.4*	*-0.2*	*2.6*	*12.8*	*13.5*	*11.3*	*18.1*	*7.0*	*-7.9*	*-13.1*	*0.5*	*-7.0*	*0.3*	*4.0*	*3.1*
Unlisted	City & Mid-Town	9.9	4.1	3.6	3.7	8.0	18.3	37.0	20.9	4.7	-5.1	-23.3	-28.6	-16.3	3.0	-1.1	2.9	18.4	14.0	9.0	19.8	5.1	-12.2	-16.9	-0.4	-10.1	-1.8	3.2	2.2
	West-End	7.6	1.7	-0.4	2.0	4.3	9.9	34.8	39.2	13.3	-2.9	-24.4	-29.3	-13.1	1.0	2.0	7.0	14.5	11.9	12.5	23.0	5.6	-9.2	-12.1	5.3	-5.6	1.8	5.6	3.2
	All London	9.2	3.1	2.0	2.7	5.7	13.2	33.1	27.1	9.3	-3.2	-21.6	-27.3	-15.3	0.4	-0.4	3.9	15.4	12.5	10.2	19.8	5.2	-10.1	-14.1	1.0	-8.0	-0.4	3.8	2.4
	Rest of England	9.3	4.6	3.7	3.7	4.7	6.9	10.0	19.8	23.3	7.4	-2.5	-11.6	-11.4	-3.4	-2.1	1.3	5.8	6.1	5.1	6.3	1.9	-2.5	-5.0	-0.6	-2.7	-0.1	1.6	3.1
	All England	*9.2*	*3.4*	*2.3*	*2.9*	*5.5*	*11.9*	*28.4*	*25.8*	*11.9*	*-0.7*	*-16.6*	*-22.1*	*-13.8*	*-1.1*	*-1.1*	*2.9*	*11.6*	*10.1*	*8.4*	*15.0*	*4.1*	*-7.6*	*-10.9*	*0.4*	*-6.2*	*-0.2*	*3.0*	*2.6*

Appendix I		1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	3 year	5 year	10 year	24 year
Equivalent Yield																													
Listed	City & Mid-Town	6.6	6.7	6.8	6.7	7.2	7.3	7.5	7.3	7.6	9.2	10.2	10.5	8.3	8.3	8.3	8.5	8.3	8.4	8.4	8.7	8.9	8.8	8.3	6.9				
	West-End	7.6	7.7	8.0	8.0	7.9	7.6	7.5	7.2	7.5	8.4	9.1	9.9	8.7	7.9	7.7	7.6	7.3	7.9	7.5	7.8	8.2	7.9	7.5	6.6				
	All London	7.1	7.2	7.3	7.2	7.5	7.4	7.5	7.3	7.6	8.9	9.6	10.2	8.6	8.1	8.0	8.0	7.9	8.1	7.9	8.1	8.3	8.3	7.8	6.8				
	Rest of England	8.2	8.1	8.0	8.3	8.3	8.9	8.8	8.1	8.2	10.1	10.7	11.5	10.3	9.3	9.5	9.7	9.4	9.2	8.9	8.8	8.9	8.5	8.1	7.6				
	All England	*7.2*	*7.3*	*7.4*	*7.4*	*7.7*	*7.7*	*7.7*	*7.4*	*7.6*	*9.0*	*9.8*	*10.5*	*8.9*	*8.3*	*8.2*	*8.3*	*8.0*	*8.3*	*8.0*	*8.2*	*8.5*	*8.4*	*7.8*	*6.9*				
Unlisted	City & Mid-Town	7.3	7.2	7.3	7.5	7.4	7.8	7.6	7.5	7.5	9.1	10.0	10.2	8.4	7.7	8.4	8.2	7.7	7.9	7.9	8.3	8.2	8.0	7.8	7.4				
	West-End	7.5	7.6	7.9	8.1	8.2	8.4	8.1	8.0	7.5	8.6	10.0	10.6	8.6	8.1	8.6	8.2	7.5	7.5	7.4	7.6	7.9	7.5	7.1	6.6				
	All London	7.5	7.5	7.7	7.8	8.0	8.3	7.9	7.8	7.8	9.2	10.2	10.6	8.8	8.1	8.7	8.5	7.9	8.0	7.8	8.1	8.3	8.0	7.7	7.1				
	Rest of England	7.6	7.6	7.7	7.7	8.1	8.7	8.7	8.2	8.4	10.3	11.0	11.5	9.8	9.2	9.5	9.6	9.2	9.0	8.5	8.5	8.7	8.5	8.5	7.7				
	All England	*7.5*	*7.5*	*7.6*	*7.8*	*8.0*	*8.4*	*8.1*	*7.9*	*7.9*	*9.5*	*10.5*	*10.9*	*9.2*	*8.6*	*9.0*	*8.9*	*8.3*	*8.3*	*8.1*	*8.3*	*8.4*	*8.2*	*8.0*	*7.4*				
Yield Impact																													
Listed	City & Mid-Town	3.6	-1.1	-2.4	0.4	-3.7	-3.9	-1.7	2.5	-3.5	-17.2	-11.6	-6.0	22.8	0.3	-0.5	-3.1	9.4	-6.7	2.6	-1.1	-5.7	-0.5	5.8	13.6	6.1	2.2	1.2	-0.6
	West-End	1.0	-3.1	-1.0	0.3	-0.1	1.7	5.3	2.2	-4.5	-13.8	-10.5	-7.5	13.3	8.8	-1.4	1.0	1.4	-4.7	7.0	-0.2	0.5	-1.8	4.6	9.7	4.1	2.5	1.5	0.2
	All London	5.4	1.0	-1.7	0.9	-1.4	0.7	3.3	3.9	-2.6	-15.7	-11.2	-7.5	17.3	5.8	-0.8	-0.9	4.8	-4.9	5.9	-0.3	-1.7	-1.3	5.2	11.6	5.0	2.6	1.7	0.4
	Rest of England	0.6	1.0	-0.2	-4.4	-3.7	-9.4	1.6	6.6	0.0	-17.7	-8.8	-6.5	9.3	2.1	-4.2	-4.9	-0.1	0.9	2.0	1.8	-2.5	6.3	3.2	9.3	6.2	3.6	1.1	-0.9
	All England	*2.1*	*-1.3*	*-1.6*	*-0.3*	*-2.2*	*-2.3*	*1.9*	*2.8*	*-3.8*	*-16.0*	*-10.7*	*-7.3*	*15.9*	*4.6*	*-1.2*	*-1.5*	*4.1*	*-4.0*	*5.3*	*-0.1*	*-2.1*	*-0.3*	*4.9*	*11.2*	*5.1*	*2.6*	*1.5*	*-0.3*
Unlisted	City & Mid-Town	1.2	-0.9	-2.5	-2.9	-0.8	-5.4	4.5	0.0	-1.6	-16.8	-12.1	-1.1	19.4	9.2	-6.7	0.8	6.5	-2.1	-0.3	-2.4	-2.0	2.7	4.3	8.8	5.2	2.2	0.9	-0.2
	West-End	5.8	-2.3	-2.2	-1.1	-1.3	-1.4	3.6	2.3	4.2	-12.2	-13.2	-6.6	23.3	8.7	-7.5	7.2	7.1	2.4	1.3	-1.5	-3.0	5.2	5.6	10.1	6.9	3.2	2.6	1.2
	All London	4.5	-0.7	-1.9	-1.7	-1.4	-1.0	6.6	2.5	-0.1	-15.5	-11.6	-3.8	19.2	8.0	-6.4	2.3	6.7	0.2	0.9	-2.2	-2.7	3.1	3.9	9.6	5.5	2.2	1.4	0.5
	Rest of England	3.4	-0.6	-1.8	-1.8	-5.2	-8.2	0.4	5.5	-2.2	-18.9	-8.2	-4.7	15.6	4.8	-5.1	-1.2	2.5	0.1	2.7	-0.1	-3.8	1.2	0.5	8.4	3.3	1.2	0.5	-0.9
	All England	*2.6*	*-1.8*	*-2.1*	*-2.7*	*-3.2*	*-5.5*	*3.1*	*1.8*	*-1.4*	*-16.6*	*-10.6*	*-4.0*	*17.9*	*6.6*	*-6.1*	*1.3*	*5.2*	*0.1*	*1.5*	*-0.8*	*-3.1*	*2.4*	*2.5*	*9.2*	*4.6*	*1.9*	*1.1*	*-0.4*
Year End Capital Value (£m)																													
Listed	City & Mid-Town	255	290	369	399	459	557	759	913	1,022	898	675	592	629	641	631	588	521	529	544	579	551	497	353	342				
	West-End	358	382	386	422	454	525	642	920	1,067	1,016	780	631	646	800	842	880	947	976	966	1,149	1,039	986	901	968				
	Rest of London	10	16	17	12	11	13	19	17	22	18	16	14	15	23	19	20	21	23	14	37	42	59	31	39				
	All London	624	688	772	833	924	1,094	1,420	1,850	2,110	1,932	1,471	1,237	1,291	1,465	1,493	1,487	1,489	1,528	1,524	1,765	1,632	1,542	1,285	1,349				
	Rest of England	90	104	116	130	149	163	188	239	306	294	293	284	287	310	286	279	236	235	220	240	214	217	212	236				
	All England	*714*	*792*	*888*	*964*	*1,074*	*1,257*	*1,608*	*2,089*	*2,416*	*2,226*	*1,764*	*1,521*	*1,578*	*1,774*	*1,779*	*1,766*	*1,725*	*1,763*	*1,743*	*2,005*	*1,846*	*1,759*	*1,497*	*1,585*				
Unlisted	City & Mid-Town	3,101	3,376	4,265	4,721	5,424	6,267	8,696	10,716	11,607	9,793	7,666	6,513	7,282	7,527	7,330	7,380	7,995	9,540	10,006	11,492	12,624	11,183	9,108	9,598				
	West-End	1,608	1,669	2,298	2,447	2,601	2,917	4,055	5,469	6,414	5,379	4,256	3,505	3,607	3,985	4,254	4,352	5,033	5,832	6,811	7,829	8,410	7,921	7,180	7,937				
	Rest of London	1,054	1,198	1,351	1,434	1,442	1,392	1,548	2,133	2,326	2,224	2,066	1,701	1,957	2,025	1,811	1,805	2,140	2,456	2,975	3,901	3,932	3,755	3,467	3,625				
	All London	5,763	6,242	7,915	8,602	9,467	10,575	14,300	18,319	20,346	17,396	13,988	11,719	12,847	13,537	13,395	13,537	15,168	17,829	19,792	23,222	24,967	22,858	19,756	21,161				
	Rest of England	1,795	2,013	2,354	2,632	2,965	3,022	3,424	4,558	6,116	5,964	5,971	5,415	6,375	7,382	7,141	7,216	8,140	9,233	10,158	12,099	12,384	12,530	11,799	12,544				
	All England	*7,558*	*8,256*	*10,269*	*11,234*	*12,432*	*13,597*	*17,724*	*22,877*	*26,462*	*23,360*	*19,959*	*17,134*	*19,221*	*20,918*	*20,537*	*20,753*	*23,307*	*27,061*	*29,950*	*35,321*	*37,350*	*35,389*	*31,554*	*33,705*				
Number of Properties at Year End																													
Listed	City & Mid-Town	92	96	101	103	111	109	101	110	112	115	117	121	114	104	102	88	81	89	88	85	77	64	52	47				
	West-End	191	198	203	213	209	235	228	229	231	234	230	227	214	216	212	253	236	219	205	200	169	162	151	128				
	Rest of London	9	9	8	8	8	9	11	10	9	9	9	10	8	9	7	7	7	7	4	5	5	6	5	5				
	All London	292	303	312	324	328	353	340	349	352	358	356	358	336	329	321	348	324	315	297	290	251	232	208	180				
	Rest of England	161	180	180	195	204	205	206	202	212	224	220	210	199	204	184	170	130	109	85	74	54	45	42	41				
	All England	*453*	*483*	*492*	*519*	*532*	*558*	*546*	*551*	*564*	*582*	*576*	*568*	*535*	*533*	*505*	*518*	*454*	*424*	*382*	*364*	*305*	*277*	*250*	*221*				
Unlisted	City & Mid-Town	640	642	728	734	748	735	690	683	673	673	664	734	746	729	675	679	646	691	683	669	650	621	557	531				
	West-End	448	454	531	526	521	543	537	538	541	533	534	556	531	551	563	535	526	567	566	554	522	503	450	446				
	Rest of London	439	473	480	482	492	484	422	416	393	403	421	413	419	420	391	374	361	342	309	335	323	321	292	279				
	All London	1,527	1,569	1,739	1,742	1,761	1,762	1,649	1,637	1,607	1,609	1,619	1,703	1,696	1,700	1,629	1,588	1,533	1,600	1,558	1,558	1,495	1,445	1,299	1,256				
	Rest of England	1,302	1,371	1,432	1,475	1,578	1,564	1,515	1,497	1,571	1,678	1,769	1,758	1,803	2,018	1,997	1,924	1,855	1,801	1,671	1,687	1,589	1,530	1,423	1,378				
	All England	*2,829*	*2,940*	*3,171*	*3,217*	*3,339*	*3,326*	*3,164*	*3,134*	*3,178*	*3,287*	*3,388*	*3,461*	*3,499*	*3,718*	*3,626*	*3,512*	*3,388*	*3,401*	*3,229*	*3,245*	*3,084*	*2,975*	*2,722*	*2,634*				

Appendix II - Significance test on listed and unlisted office populations

NB: The performance measures reported by IPD in this report are money weighted. However, the t-test assumes that properties are equally weighted and normally distributed. Therefore the performance measures tested in this appendix are different to those in the report because they are the equally weighted mean rather than the money weighted performance measures used by IPD. The mean performance measures have been included in this appendix.

H_0: listed is not equal to unlisted
Significance tests carried out using a two tailed t-test at the 5% significance level.

	Mean - Listed	Mean - Unlisted	Probability that t is significant	
All England				
t-test for returns	18.9	16.7	0.12	Accept H_0 total returns are not significantly different
t-test for income return	7.19	7.85	0.56	Accept H_0 income returns are not significantly different
t-test for capital growth	10.91	8.61	0.09	Accept H_0 capital growths are not significantly different
t-test for rental value growth	1.51	-0.02	0.13	Accept H_0 rental value growths are not significantly different
t-test for yield	6.84	7.92	0.00	Reject H_0 yield impacts are significantly different
t-test for yield impact	13.30	11.04	0.25	Accept H_0 yield impacts are not significantly different
West-End				
t-test for returns	20.28	19.15	0.68	Accept H_0 total returns are not significantly different
t-test for income return	7.06	7.73	0.53	Accept H_0 income returns are not significantly different
t-test for capital growth	12.27	11.80	0.86	Accept H_0 capital growths are not significantly different
t-test for rental value growth	0.73	4.42	0.07	Accept H_0 rental value growths are not significantly different
t-test for yield	6.54	7.01	0.18	Accept H_0 yield impacts are not significantly different
t-test for yield impact	14.05	11.54	0.34	Accept H_0 yield impacts are not significantly different
City & Mid-Town				
t-test for returns	14.39	16.22	0.69	Accept H_0 total returns are not significantly different
t-test for income return	7.00	8.28	0.80	Accept H_0 income returns are not significantly different
t-test for capital growth	6.93	8.25	0.73	Accept H_0 capital growths are not significantly different
t-test for rental value growth	3.53	-2.10	0.05	Reject H_0 rental value growths are significantly different
t-test for yield	6.74	7.72	0.40	Accept H_0 yield impacts are not significantly different
t-test for yield impact	13.52	15.75	0.76	Accept H_0 yield impacts are not significantly different
All London				
t-test for returns	18.70	17.78	0.67	Accept H_0 total returns are not significantly different
t-test for income return	7.06	8.08	0.56	Accept H_0 income returns are not significantly different
t-test for capital growth	10.81	9.86	0.63	Accept H_0 capital growths are not significantly different

t-test for rental value growth	1.48	0.44	0.47	Accept H_0 rental value growths are not significantly different
t-test for yield	6.63	7.53	0.05	Accept H_0 yield impacts are not significantly different
t-test for yield impact	14.02	13.45	0.86	Accept H_0 yield impacts are not significantly different
Rest of England				
t-test for returns	20.00	15.61	0.02	Reject H_0 total returns are significantly different
t-test for income return	7.80	7.63	0.78	Accept H_0 income returns are not significantly different
t-test for capital growth	11.37	7.46	0.02	Reject H_0 capital growths are significantly different
t-test for rental value growth	1.66	-0.43	0.16	Accept H_0 rental value growths are not significantly different
t-test for yield	7.69	8.24	0.16	Accept H_0 yield impacts are not significantly different
t-test for yield impact	10.83	9.14	0.33	Accept H_0 yield impacts are not significantly different