

## Index series

Note: A more detailed breakdown of the annual results, by region and age band, and including results on a smaller sample back to 1980, is available on the IPD website, [www.ipdglobal.com](http://www.ipdglobal.com)

Index series					
Year end 31st Dec	Total return %	No. of forests	Total return index	Timber price change	*Timber price index
1993	-4.3	130	95.7	11.3	111.3
1994	9.5	130	104.8	21.1	134.8
1995	8.6	126	113.8	-5.6	127.2
1996	10.9	130	126.2	-7.5	117.7
1997	4.0	131	131.2	-14.9	100.1
1998	-1.4	156	129.4	-37.9	62.2
1999	-11.1	157	115.1	-2.7	60.5
2000	-2.9	155	111.7	-8.7	55.3
2001	-1.1	163	110.5	-4.9	52.6
2002	-4.7	169	105.3	-22.3	40.8
2003	1.3	165	106.7	-2.8	39.7
2004	9.2	161	116.5	5.8	42.0
2005	14.4	158	133.3	15.6	48.5

Total return and timber price indices based at 1992=100  
 \* Forestry Commission Nominal Price Index of Coniferous Standing Sales (for Great Britain) on a year to March basis (2005 = March 2006). It reflects the price in other years of the size and mix of timber sold in the base year. This is based on a size and mix of timber in 1996 and the series has been re-based to 1992.

### Index design

The sample was originally structured to reflect market capitalisation across the regions and an approximately even number of plantations by age band in each region. This pattern has been distorted over the years by the ageing of plantations. For the purposes of the age band analysis plantations are artificially sold and re-purchased when they change bands. Properties are included in the three year rolling returns according to their age in the end-year of the period. If a forest is sold from the sample it is replaced by one of the same region and age band. Felled plantations are replaced by the youngest age band whenever possible.

Tax position as at December 2005	
INCOME TAX	All income from UK timber sales is free of Income and Corporation Tax
CAPITAL GAINS TAX	Growing timber is exempt from Capital Gains Tax
INHERITANCE TAX	After two years of ownership, commercial woodlands qualify for 100% Business Property Relief

Sample composition by age band					
Years	0-10	11-20	21-30	>30	Total
No. of forests	11	40	42	65	158
% Capital value	5.5	18.2	29.9	46.4	100.0

Sample composition by region						
Region	North Scotland	Mid Scotland	South Scotland	North England	Wales	Total
No. of forests	21	29	56	20	32	158
% Capital value	9.8	16.1	40.7	9.4	23.9	100.0

Valuation Range (£ per hectare) by age at 2005				
Years	0-10	11-20	21-30	>30
5th percentile	3,312	2,677	2,769	4,084
Upper quartile	2,602	1,698	2,192	3,222
Median	1,886	1,496	1,843	2,721
Lower quartile	1,250	1,360	1,437	2,155
95th percentile	849	787	1,099	1,269
Weighted Average	1,772	1,450	1,728	2,314

### Acknowledgments

IPD would like to thank all those forest owners, land agents and forest managers who have provided information for this analysis and the Forestry Commission who contributed to the cost of data collection and analysis. Forestry consultancy has been provided by the sponsors who are responsible for the Market Commentary section of the text.

### Special note

Every care has been taken to ensure the correctness and accuracy of this publication. IPD cannot accept responsibility for any errors or omissions.

Long term total return by age (%pa)				
Year end 31st Dec Annualised	0-10	11-20	21-30	>30
1996-99	2.9	-0.5	-2.9	-5.3
1997-00	4.5	-2.5	-6.1	-6.5
1998-01	7.5	-3.0	-6.5	-5.2
1999-02	9.7	-1.7	-4.5	-2.5
2000-03	9.3	-1.7	-2.2	-1.8
2001-04	14.9	2.4	0.7	1.2
2002-05	27.0	7.2	7.1	7.6
1996-01	6.0	-0.5	-3.2	-3.7
1997-02	6.2	-2.6	-5.2	-5.1
1998-03	8.1	-2.4	-4.9	-4.1
1999-04	13.2	1.2	-1.1	0.3
2000-05	19.3	3.0	2.6	3.2
1992-05	10.0	2.3	2.5	1.1

Range of return by age 2002-2005 (%pa)				
Percentile	0-10	11-20	21-30	>30
5th percentile	44.7	19.3	16.8	24.4
Upper quartile	36.1	10.7	12.5	10.8
Median	19.3	6.4	7.3	5.8
Lower quartile	14.9	2.7	3.9	0.7
95th percentile	5.9	0.7	-0.4	-5.5
Weighted average	27.0	7.2	7.1	7.6

Long term total return by region (%pa)					
Year end 31st Dec Annualised	North Scotland	Mid Scotland	South Scotland	North England	Wales
1996-99	-5.5	-4.0	-3.6	0.6	-2.1
1997-00	-3.5	-4.2	-5.8	-5.4	-5.4
1998-01	-3.4	-4.0	-5.9	-5.8	-4.3
1999-02	-3.2	-0.2	-2.2	-4.5	-5.4
2000-03	-1.4	1.6	-1.3	-3.2	-3.0
2001-04	-0.5	5.9	2.2	1.3	0.2
2002-05	5.7	9.5	8.4	7.6	8.4
1996-01	-3.9	-2.4	-3.0	-1.4	-2.7
1997-02	-3.6	-2.7	-4.2	-5.0	-5.4
1998-03	-2.8	-1.4	-4.2	-4.6	-4.0
1999-04	-0.8	3.5	0.5	-1.0	-1.4
2000-05	1.9	5.4	4.2	2.6	2.7
1992-05	-1.4	1.2	3.7	1.7	2.0

Range of return by region 2002-2005 (%pa)					
Percentile	North Scotland	Mid Scotland	South Scotland	North England	Wales
5th percentile	14.7	28.9	25.5	17.5	29.8
Upper quartile	10.3	10.3	12.6	11.7	13.7
Median	5.8	6.5	6.6	8.4	6.5
Lower quartile	3.1	2.5	2.1	3.4	2.9
95th percentile	-2.0	-3.0	-0.9	-2.2	-5.6
Weighted average	5.7	9.5	8.4	7.6	8.4

### Contacts:

For further information please contact:  
 Rebecca Graham +44 (0)20 7336 9235 [rebecca.graham@ipdglobal.com](mailto:rebecca.graham@ipdglobal.com)  
 Kevin Swaddle +44 (0)20 7643 9275 [kevin.swaddle@ipdglobal.com](mailto:kevin.swaddle@ipdglobal.com)

IPD, 1 St. John's Lane, London EC1M 4BL, United Kingdom  
 Tel: +44 (0)20 7336 9200 Fax: +44 (0)20 7336 9399 [www.ipdglobal.com](http://www.ipdglobal.com)

© 2006 Investment Property Databank Ltd (IPD). All rights conferred by law of copyright by virtue of the international copyright conventions are reserved by IPD. No part of the IPD Forestry Index may be reproduced or transmitted, in any form or by any means, without the prior written consent of IPD. ISBN 1 869930 436

### Sponsored by:

Bidwells  
 Border Consultants  
 Close Brothers Investment  
 Forestry & Timber Association  
 Forestry Commission  
 Forestry Investment Management  
 fountains plc  
 Scottish Woodlands Ltd  
 UPM Tilhill

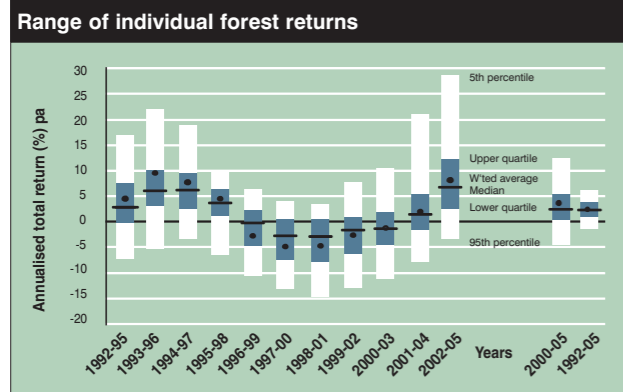
### Results to December 2005

%pa	2005	3 years (2002-2005)	Annualised 5 years (2000-2005)	Long term (1992-2005)
<b>Forestry</b>				
Total return	14.4	8.2	3.6	2.2
Timber price change	15.6	5.9	-2.6	-5.4
<b>Other assets (total return)</b>				
Equities	22.0	18.5	2.2	9.4
Gilts	7.4	5.2	6.0	8.4
Commercial property	19.1	16.0	12.8	12.5





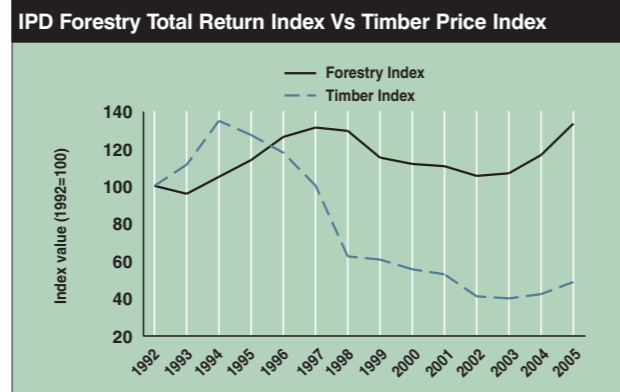
# Summary of full results



3 year rolling annualised returns						
	W'ted average	Top 5%	Upper quartile	Median	Lower quartile	Bottom 5%
<b>3 year (%pa)</b>						
1995-98	4.4	9.9	6.2	3.5	0.9	-6.9
1996-99	-3.0	6.4	2.2	-0.5	-5.0	-11.3
1997-00	-5.2	3.9	0.2	-3.1	-8.0	-13.8
1998-01	-5.1	3.5	0.3	-3.3	-8.4	-15.4
1999-02	-2.9	7.8	0.7	-1.8	-6.8	-13.7
2000-03	-1.5	10.7	1.7	-1.7	-5.0	-11.8
2001-04	1.8	21.6	5.4	1.2	-1.7	-8.3
2002-05	8.2	29.2	12.5	6.7	2.5	-3.8

## Summary

- The average total return on investments in forestry in 2005 was 14.4%. This built on the return of 9.3% from last year and is the highest annual return since the index began in 1992. The longer term annualised returns were 8.2% per annum for the three years to December 2005, and 3.6% pa over the last five years. The annualised return for the 13 year period since the start of the index in 1992 has risen to 2.2% pa.
- Once again some forests in the sample have performed remarkably well this year, with the top 5% of plantations achieving a three year annualised return of at least 29.2%. There is, however, a wide range of individual forest returns, with the bottom 5% showing returns lower than -3.8%. This range narrows substantially when looking at a longer period; over 13 years, half of forests had annualised returns of between 0.7% and 3.7%.
- When compared to other asset classes over 2005 and three years, forestry returns were higher than gilts, but lower than UK equities and commercial property. However, over 5 years, forestry investments actually outperformed UK equities. Over the longer 13 year period, forestry was the worst performing asset, although forestry returns have been less volatile than either equities or gilts. This characteristic, along with its low correlation with equities, gilts and property, gives forestry a diversifying quality that can be exploited in multi-asset portfolios.
- For another year, forestry investment has undoubtedly benefited from the rising timber prices over 2005. Timber prices were 15.6% higher in March 2006 than in March 2005, and 22.3% higher than in March 2004.
- The Index has a large number of plantations in the older age bands - forests over 20 years old represent over 76% of the total capital value. The performance of older forests therefore has a greater impact on overall forestry returns. So, although younger forests performed particularly well, headline returns were held back to a large degree by the lower returns of older forests.



5 year rolling and long term annualised returns						
	W'ted average	Top 5%	Upper quartile	Median	Lower quartile	Bottom 5%
<b>5 year (%pa)</b>						
1995-00	-0.4	6.0	2.8	0.3	-2.4	-8.2
1996-01	-2.6	3.4	1.3	-1.0	-4.6	-10.5
1997-02	-4.3	3.3	0.1	-3.0	-6.9	-13.3
1998-03	-3.8	4.9	0.5	-2.6	-6.9	-13.1
1999-04	0.2	10.3	3.0	0.2	-3.1	-9.5
2000-05	3.6	12.7	5.5	2.2	0.1	-5.0
<b>Long term (%pa)</b>						
1992-05	2.2	6.3	3.7	2.1	0.7	-1.7

## Tax Status

Tax is a very important consideration for investors in forestry, but the wide variation of tax status between investors makes it impossible to reflect these benefits in the results. The index excludes these substantial fiscal advantages that are available to the investor.

Income from timber sales in the UK is free of Income and Corporation Tax and growing timber is exempt from Capital Gains Tax. After two years of ownership, commercial woodlands qualify for 100% Business Property Relief from Inheritance Tax.

## The Index

The IPD forestry index is calculated from a sample of private sector coniferous plantations of predominantly Sitka spruce in mainland Britain. By the end of 2005 the 158 forests in the index had a total capital value of £83.1m.

The index is derived from a series of annual valuations and cash flows, but in order to reflect the long-term nature of forestry investment the series is presented on a three year annualised basis. The year-on-year returns and index values are shown on the back of this publication, but analysis is based principally on the annualised results. These demonstrate more clearly the long-term returns available to investors.

The series is based at 1992 after the expiry of tax relief on expenditure, which was withdrawn in March 1988 with a period of transitional relief until December 1992. The index reflects movements in valuations driven by changes in the underlying long-term trend in UK timber markets and investor demand.

The calculation of forestry returns was modified for this year's index, to move in line with IPD's standard method of calculating investment performance and to conform to international standards of asset performance measurement. Annual returns are now calculated on a time-weighted basis, by compounding the 12 individual monthly returns. As a result of this change, the index history has been restated.

# Market commentary provided by the sponsors

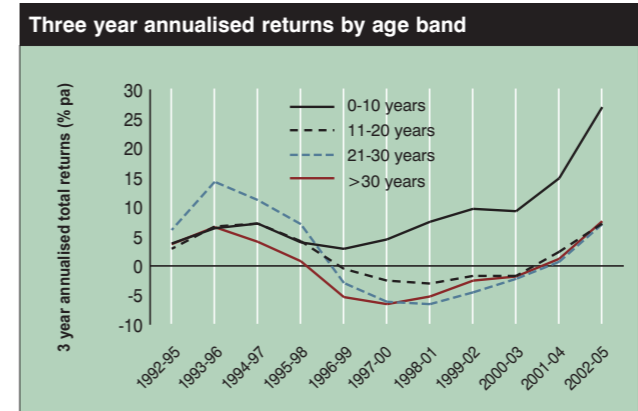
The calendar year 2005 began with a devastating windblow in Scandinavia and Northern Europe. However the expected boost in supply was controlled and the effects on the homegrown market were much less than anticipated. Despite a faltering DIY sector in the second half of 2005, overall UK output of timber products remained fairly stable throughout the year.

Roundwood removals increased by 2% in 2005 to some 8.4 million cubic metres underbark. This contributed to the production of 2.8 million cubic metres of sawnwood (also up 2% on 2004). Wood based panel production remained constant with 3.5 million cubic metres while paper and paperboard production fell 3% to 6.0 million tonnes.

Although still importing over four fifths of wood and wood based panels and almost two thirds of pulp and paper in 2005, the trading situation improved with imports falling and exports rising in both volume and value terms.

The UK economy is still enjoying one of its longest periods of economic stability. Although 2005 did see increasing unemployment the outlook is still stable but a change cannot be ruled out. High oil prices have impacted on energy costs particularly in the processing sector and this factor is boosting the market for woodfuel, both for small scale heating and power schemes and for large industrial scale power plants.

The Forestry Commission's Coniferous Standing Sales Price Index for Great Britain was 13.6% higher in real terms in the year to March 2006, compared with an increase of 3.5% in the previous year. The private sector saw price increases at similar levels for both logs and standing sales in all regions except southern England. Strong standing timber sales were recorded throughout 2005 with increases in all areas especially towards the end of the year.



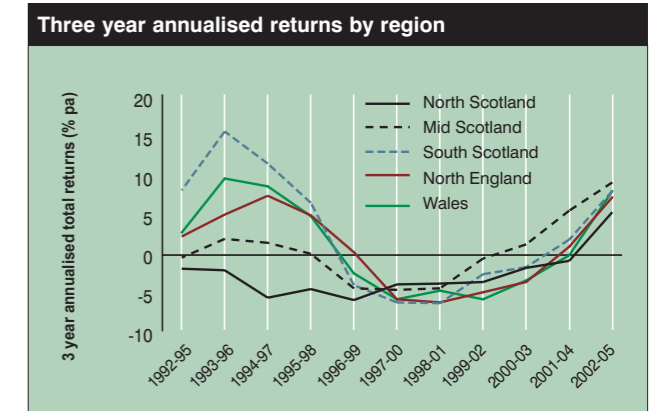
## Performance by age and region of plantation (see tables overleaf for figures)

- Plantations of all age bands showed a marked improvement in performance last year, each with double-digit returns during 2005. The best performance continued to be from the youngest forests (0-10 years old), returning 27% per annum over the three years to 2005 - over the last eight years the youngest forests have consistently out-performed the older forests. The three older age bands had roughly equal returns over the three years to 2005, at 7-8% per annum.
- Plantations under ten years old also had the best performance over the longer term back to 1992, returning 10% per annum. This is considerably higher than the long term returns for older forests - plantations over 30 years old have returned 1.1% pa over the last 13 years. The performance of older forests is more responsive to the price of timber, so they were more adversely affected by the collapse of timber prices in the late 1990s, and have only recently started to recover.
- The range of performance within each age band is considerable as local conditions and timber quality can have a major effect on individual plantation valuations. Top quartile returns in the youngest age band over the last three years have been above 36%, while the bottom quartile had returns below 14.9%. For another year semi-mature forests (aged 21-30) had the narrowest ranges of returns, with 90% of these plantations returning between -0.4% and 16.8% per annum.

The growing timber frame housing market continues to support demand for sawlogs while purchases of new homes and general construction are expected to grow in 2006, further strengthening demand. Meanwhile, in the biomass sector, the launch of the England woodfuel strategy this autumn is expected to stimulate interest in woodfuel and accelerate the supply of small round wood especially from currently unmanaged woodlands. Scotland and Wales are also developing woodfuel strategies. Live biomass projects, such as the E.On plant at Lockerbie which will consume 500,000 green tonnes of sawmill co-products & biomass, and the Sembcorp Plant at Middlesbrough which will consume 300,000 green tonnes show the emerging strength of this sector. Projects such as these continue to increase in number and it is expected that this sector will very soon reach critical mass and take off.

Commercial woodland prices moved steadily upwards in 2005, influenced by confidence in the future timber market and by a shortage of supply in all regions. The woodlands included within the Spring 2006 Tiltill/Savills Forest Market Report showed a 22% increase in average sale price, with the market size increasing by 50% to £36million. Final sale prices frequently exceeded guide prices by margins of 10-20%. Woodlands sold in Wales and southern Scotland attracted amenity premiums at a level only seen previously in southern England. This reflects disposable income levels and associated tax planning, as well as the raised environmental profile of forestry.

The longer-term considerations are unchanged from last year with carbon emissions targets and potential sequestration in forests still very topical. The impact on the sector of China's phenomenal demand for natural resources, and the price and availability of oil and gas are still underlying factors which can only reinforce the global timber market. In conclusion, 2005 was a good year for the industry and 2006 looks set to continue that trend.



- Wales saw the greatest variation in returns over the last three years, with the 5th percentile returning 29.8%, compared to -5.6% for the 95th percentile. Mid Scotland had the most skewed distribution with a weighted average of 9.5% and a median of 6.5%. In fact, more than three fifths of these forests returned below the weighted average. This was due to the strong returns on a small number of the higher valued plantations in the sample.
- Analysis of performance by region is obscured by differences in the age composition of the sample in each area, which are not perfectly balanced. Some of the variation in performance is undoubtedly due to this variation in age mix. Investment returns have again been strongest on plantations in the Mid Scotland region over the last three years, at 9.5% pa. The weakest performing region, North Scotland, finally saw a positive three year annualised return of 7.5% after more than ten years of negative results.
- Weighted average capital values for each age band go from £1,772 per hectare for plantations under ten years old, to £2,314 for mature plantations. The median value for the oldest age band is significantly higher than the weighted average - half of these forests are valued at over £2,700 per Ha. Within each age band, individual estates have a wide range of valuations, due to factors including lot size, access, terrain, stem form and amenity value. Mature forests have the widest range, with the 5th and 95th percentiles having values as diverse as £1,269 and £4,084 per Ha.