

## INSURANCE VALUES AND BUSINESS AT RISK

### SPRING 2008

#### INTRODUCTION

RE:VIEW is published to help insurance professionals and clients understand some of the key valuation issues relating to insurance and deals with inflation and other matters that can affect the accuracy of sums insured.

Our Spring 2008 edition includes an update of the 'Regional Prices – Building Tender Price Inflation' data table as at April 2008, to cover the period 2004 to 2007.

It is interesting to note that all UK regions have seen tender cost rises during 2007, with London showing the greatest increase. This is not surprising perhaps given the level of new construction work taking place for the 2012 Olympics.

Despite strong growth during 2007, the increase in new construction work output is expected to slow during 2008 and this is partly due to the now accepted 'credit crunch.' This is likely to impact on investors in new construction who may delay or cancel schemes planned for 2008 because of uncertainty in the economy, both nationally and internationally.

#### KNOWING THE ANSWER

Under-insurance is a major concern, with the application of 'average' often leading to a reduced settlement in the event of a claim. If an insurance policy is 'subject to average', then if the sum insured at the time of a loss is less than actual reinstatement cost, the amount paid under the terms of the policy will be reduced in proportion to the degree of under-insurance. Over-insurance is unnecessary and simply results in excessive premiums being paid for no benefit in return.



A fundamental part of the valuation process is establishing that the existing sums insured are accurate and there are a number of reasons in this paper as to why this is not always the case.

The following notes outline some of the key issues influencing the accuracy, or otherwise, of sums insured for property, plant, machinery and equipment assets. The notes are based on direct experience of working with clients and, particularly, from the occasions upon which we have been asked to explain why substantial differences in value occur between our results and existing sums insured.

## PROPERTY

The construction industry can be volatile in terms of costs and, in recent years, building tender price inflation has been rising much faster than UK 'inflation' which is regularly quoted as running at 2-4% per annum. To apply the UK headline rate of inflation to property insurance values is incorrect and may considerably understate the true cost position.

From available indices, we have created a table on page 3 which shows tender price inflation, as percentage increases, for 2004 to 2007 for eleven regions and their sub-locations. It represents a guide to indicate the percentage change in building tender prices. The data represents general trends and is based on the analysis of accepted tenders for new building works with contract sums over GBP 100,000. The figures are based on actual projects and the prices charged by construction companies and contractors.



The figures have also been calculated to show the overall effect of four years' inflation to the end of December 2007 which, in the highest case indicated for Scotland, shows just under 37%. Put simply, a client with a property based on a sum insured calculated in 2004 which has not been uplifted for inflation to year end 2007 could be 37% under-insured.

Inflation monitoring is a crucial feature to maintain values but, of course, it is vital that the base value is assessed properly and is known to be accurate. It is important that valuers give careful consideration to listed buildings as the costs to reinstate architecturally complex buildings in the event of a serious partial or total loss can be high owing to the requirement to comply with statutory obligations.

Increased cost pressures such as the London 2012 Olympics and National Lottery funded projects may cause industry shortages resulting in the leading construction companies being able to increase prices in line with demand. This is a typical economic factor as to why building tender price inflation fluctuates.

## BUILDING TENDER PRICE INFLATION 2004-2007

### Regional Prices

#### Scotland

Quarter i 2004 to Quarter iv 2004  
 Quarter i 2005 to Quarter iv 2005  
 Quarter i 2006 to Quarter iv 2006  
 Quarter i 2007 to Quarter iv 2007

% Change by year	Overall % increase 2004 to 2007
12.8	36.9
3.7	
3.0	
6.2	

#### Northern (Cleveland, Cumbria, Durham, Northumberland, Tyne & Wear)

Quarter i 2004 to Quarter iv 2004  
 Quarter i 2005 to Quarter iv 2005  
 Quarter i 2006 to Quarter iv 2006  
 Quarter i 2007 to Quarter iv 2007

11.2	27.8
3.9	
0.8	
3.1	

#### North West (Cheshire, Great Manchester, Lancashire, Merseyside)

Quarter i 2004 to Quarter iv 2004  
 Quarter i 2005 to Quarter iv 2005  
 Quarter i 2006 to Quarter iv 2006  
 Quarter i 2007 to Quarter iv 2007

9.5	17.6
0.5	
-1.3	
3.1	

#### Yorkshire and Humberside (Humberside, North Yorkshire, South Yorkshire, West Yorkshire)

Quarter i 2004 to Quarter iv 2004  
 Quarter i 2005 to Quarter iv 2005  
 Quarter i 2006 to Quarter iv 2006  
 Quarter i 2007 to Quarter iv 2007

11.5	24.9
1.3	
1.2	
5.2	

#### East Midlands (Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire)

Quarter i 2004 to Quarter iv 2004  
 Quarter i 2005 to Quarter iv 2005  
 Quarter i 2006 to Quarter iv 2006  
 Quarter i 2007 to Quarter iv 2007

9.8	24.0
1.8	
0.9	
4.5	

#### West Midlands (Hereford and Worcester, Shropshire, Staffordshire, Warwickshire, West Midlands)

Quarter i 2004 to Quarter iv 2004  
 Quarter i 2005 to Quarter iv 2005  
 Quarter i 2006 to Quarter iv 2006  
 Quarter i 2007 to Quarter iv 2007

10.4	19.3
0.4	
-1.3	
2.1	

#### East Anglia (Cambridgeshire, Norfolk, Suffolk)

Quarter i 2004 to Quarter iv 2004  
 Quarter i 2005 to Quarter iv 2005  
 Quarter i 2006 to Quarter iv 2006  
 Quarter i 2007 to Quarter iv 2007

8.1	17.7
-0.5	
-0.9	
4.5	



**South East (Bedfordshire, Essex, Hertfordshire, Kent, Surrey, East Sussex and West Sussex, Berkshire, Buckinghamshire, Hampshire, Isle of Wight, Oxfordshire)**

Quarter i 2004 to Quarter iv 2004	8.2	20.1
Quarter i 2005 to Quarter iv 2005	0.9	
Quarter i 2006 to Quarter iv 2006	0.0	
Quarter i 2007 to Quarter iv 2007	5.9	

**London (the area forming Greater London Council)**

Quarter i 2004 to Quarter iv 2004	8.9	25.8
Quarter i 2005 to Quarter iv 2005	1.9	
Quarter i 2006 to Quarter iv 2006	2.3	
Quarter i 2007 to Quarter iv 2007	9.6	

**South West (Avon, Cornwall, Devon, Dorset, Gloucestershire, Somerset, Wiltshire)**

Quarter i 2004 to Quarter iv 2004	9.1	21.5
Quarter i 2005 to Quarter iv 2005	0.9	
Quarter i 2006 to Quarter iv 2006	1.7	
Quarter i 2007 to Quarter iv 2007	5.8	

**Wales**

Quarter i 2004 to Quarter iv 2004	7.8	31.8
Quarter i 2005 to Quarter iv 2005	1.4	
Quarter i 2006 to Quarter iv 2006	0.9	
Quarter i 2007 to Quarter iv 2007	9.5	

**LATEST TENDER PRICE UPDATE**

Tender price data shows that tender prices remain virtually unchanged in 4th quarter 2007. Tender prices are, however, forecast to rise by 6.0% between 1st quarter 2008 and 1st quarter 2009, rising by a further 6.4% over the following year. The growing impact of London's Olympic scheme will gain significance over the next four years. Forecasts vary but demand will inevitably see prices rise across the UK as the major contractors become engaged on the scheme.

It is important to understand that building costs can vary across the regions. For example, taking an average location in the UK at a base of 100, the cost for building the same property in, for example, London, could be up to 25% more expensive. This is an extreme example based on rebuilding in Kensington and Chelsea but indicates how costs can vary. At the opposite end of the scale, to rebuild the same property in Grimsby would cost 90% of the UK base of 100. This is known as 'location factoring' and is taken into account by our surveyors as a cost adjustment at the time of valuation.



## **CASE STUDY – BUILDING COST INFLATION**

*Charterfields were recently appointed to undertake an initial review for building insurance purposes of an office building in the South West because the owner of the property had concerns about the accuracy of the sum insured. It was clear that the sum insured was inadequate and, on questioning the property owner on the origin of the existing amount, he advised that it was based on market value plus updates for UK 'inflation'.*



*For insurance purposes, market value is incorrect as a basis of insurance valuation since there is no relationship between the market value of a property and rebuilding cost. Market value reflects the price at which the property might exchange in the open market. The cost of rebuilding a property takes into account the actual rebuilding cost plus the costs of debris removal and all professional fees. In this case, the inflation rate being applied was based on the retail price index which, compounded over the period 2002 to 2005, added 10% rather than 32% for buildings in the South West.*

## **CASE STUDY – FOUNDATIONS UNDER THE SPOT LIGHT**

*In a case related to a foundry, the local authority involved indicated that in the event of a total loss, they would insist on the existing building line being moved due to the close proximity of a residential area. The foundations had not previously been included for cover owing to their substantial nature. As a result of our investigation, the cover programme was amended to include foundations to facilitate the positional change that would be imposed by the local authority.*

**PLANT & MACHINERY**

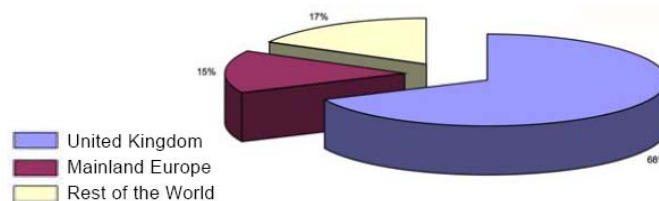


The valuation methodology applied to plant and machinery often needs careful consideration. Many organisations assess insurance values in-house using engineering or financial staff and it is often the case that too much reliance is placed on financial records in arriving at figures. Generally, it can be said that inaccuracies in value occur for the following two key reasons: -

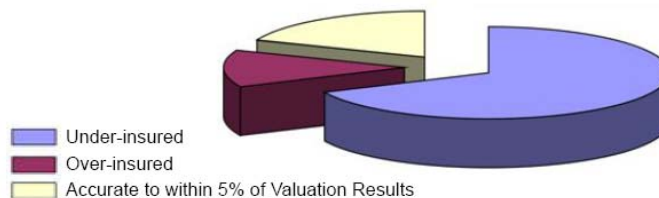
- Use and mis-use of financial asset registers;
- Incorrect use of inflation indices.

The mis-use of financial asset registers and inflation indices cause most concern and, invariably, leads to the under statement of values at risk. This is graphically illustrated on the next page and gives an analysis of cases undertaken by Charterfields from June 2005 to June 2007. Also shown are the results of an analysis of the cases which show a high percentage of clients were under-insured, some over-insured and a small percentage whose valuations were accurate to within 5% of the valuation result or within expected value parameters.

## GEOGRAPHICAL ANALYSIS OF CASES



## VALUATION ANALYSIS OF CASES



## BUSINESS SECTOR ANALYSIS



Considerable confusion exists concerning the relationship between written-down values for accounting and insurable values at risk. In practice, there is no relationship and the use of written-down values should always be avoided.

### CASE STUDY – MIS-USE OF ACCOUNTS DATA

*In a valuation exercise a 25 year old lathe in use and contributing to the profits of the business had a written-down value of GBP 1 in the accounts, as it had reached the end of its economic life. The cost of replacing it with a modern equivalent lathe was GBP 25,000. Obviously, relying on the written-down value would result in serious under-insurance in the event of a total loss as the lathe would still be required to be replaced.*

There are other areas where clients can inadvertently understate insurable values for plant and machinery. For example, the equipment used in the procurement of in-house designed and built equipment may be correctly capitalised, but the labour element overlooked. In a loss situation, the in-house capacity may not be available and more expensive third party suppliers may need to be sourced.

### CASE STUDY – IN-HOUSE LABOUR COSTS

*A company builds a packaging line using in-house labour resources. The cost of the materials and parts is GBP 36,000 which is the figure capitalised in the fixed asset register. Although the cost of in-house labour is not capitalised, it would have amounted to GBP 10,000 if outsourced. To ensure an adequate level of cover sufficient to replace the plant in the event of a loss, the plant should be insured for GBP 46,000 and not GBP 36,000 as occurred in a recent case.*

Most companies do not capitalise all asset acquisitions and, below a given level of expenditure, cost may be written off to revenue. In the UK, capitalisation thresholds are often used to determine the distinction between capital and revenue and, typically, purchase costs of GBP 100 to GBP 10,000 might be used, subject to the size and scale of the business.

For replacement insurance, all assets are required to be included regardless of status and, therefore, if a company relies entirely upon entries in an asset register, it is quite likely that a high percentage of the insurable value will automatically be excluded.

### CASE STUDY – CAPITALISATION COSTS



*A company with a capitalisation threshold of GBP 10,000 acquires 10 drilling machines, each with a purchase price of GBP 8,000. As the purchase price falls below the capitalisation threshold, the machines do not appear on the fixed asset register, although they would need to be included within an insurance valuation at a total insured value of GBP 80,000.*

The asset profile for the majority of UK companies comprises a range of countries of original supply. Typically, less than 30% of an asset base may be of UK origin and it is incorrect to simply apply UK inflation rates at renewal as a means of updating insured values.

The approach to inflation monitoring must take into account the relevant inflation rate of the country of supply and the influence of exchange rate movements between that country and GBP, where appropriate.

Very often it is necessary for insurance inflation indices to be tailored by the advisor to reflect the diversity of the assets, with regular monitoring and variation in the index mix being required as the business develops and changes.

## **BUSINESS INTERRUPTION**

In assessing the insurance value of property, plant and equipment, careful consideration needs to be given to the timescales involved in rebuilding or acquiring replacement assets.

For Business Interruption purposes the indemnity period selected for cover to protect against economic loss needs to be compared with rebuilding and/or asset replacement timescales.

## **CASE STUDY – INDEMNITY PERIOD**

*A component manufacturer producing for the white goods industry utilising specialist machines built to order in Japan. An analysis of the sums insured revealed the value to be accurate but a twenty month overall period to reinstate the assets meant that the business interruption period was increased from 12 months to 24 months to improve the level of protection.*



## **OUR SERVICES**

Charterfields Limited has a worldwide reputation for providing insurance valuation advice and we act for a diverse range of clients and insurance professionals.

Our insurance valuation service covers industrial and commercial property and plant and equipment assets. Charterfields specialist insurance valuation team has a wealth of experience and can comprehensively advise clients and insurance professionals on values at risk in any business sector both nationally and internationally.

Charterfields services cover:-

- **Property rebuilding assessments**
- **Plant and equipment**
- **Claims management**
- **National and international service support**
- **Expert witness**

Our latest service, Health Check Reports, provides an initial 'no cost' review of sums insured. This is an invaluable tool for the broker in helping clients review programme cover without immediate cost.



## **CONTACT**

For initial advice and support, please contact: -

### **Neil Warburton**

Tel: 0870 0434170 ext 1023  
Mobile: 07836 359835  
Fax: 0870 0434172  
Email: [neil.warburton@charterfields.com](mailto:neil.warburton@charterfields.com)

## **FUTURE EDITIONS**

RE:VIEW is a bi-annual publication, sent by email to interested parties. If you have colleagues who would benefit by receiving RE:VIEW then please provide email contact details to: [alison.lewington@charterfields.com](mailto:alison.lewington@charterfields.com)

## **OFFICES**

### **London**

10 Fenchurch Avenue  
LONDON  
EC3M 5BN

### **Manchester**

City Tower  
Piccadilly Plaza  
MANCHESTER  
M1 4BD

### **Sheffield**

The Lodge  
Westbrook Court  
2 Sharrow Vale Road  
SHEFFIELD  
S11 8YZ

Central Telephone: 0870 043 4170

