22 November 2004

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Incorporated in The Netherlands
The liability of members is limited

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The Manager
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Dear Sir/Madam

Attached is a report prepared by KPMG on the valuation of asbestos related disease liabilities arising from the manufacture or use of asbestos by the former subsidiaries of James Hardie Industries NV.

Yours faithfully

PIM VLOT
COMPANY SECRETARY

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Valuation of asbestos-related disease liabilities arising from the manufacture or use of asbestos by the former subsidiaries of James Hardie Industries NV

As at 30 June 2004

Prepared for James Hardie Industries NV

21 November 2004

EXECUTIVE SUMMARY

Legal Disclaimer

This valuation report ("the Report") has been prepared by KPMG Actuaries Pty Limited (A.B.N. 77 002 882 000) for the sole use of the participants in negotiations between James Hardie Industries NV, the ACTU and the Asbestos Victims Group in relation to the management, administration and settlement of asbestos-related claims. The Report is not intended to be used for any other purpose and may not be suitable for any other use. Opinions and estimates contained in the Report constitute our judgement as of the date of the Report and are subject to change without notice.

In preparing the Report, KPMG Actuaries has relied on information supplied to it from various sources and has assumed that that information is accurate and complete in all material respects. KPMG Actuaries has not independently verified or established the reliability, accuracy or completeness of the data and information used for this Report and was not provided with the information required to carry out such a verification exercise.

The Report should not be used for any purpose other than that for which it was intended. Except insofar as liability under statute cannot be excluded, KPMG Actuaries, its directors, employees and agents will not be held liable for any loss or damage of any kind arising as a consequence of any use of the Report or purported reliance on the Report including any errors in, or omissions from, the valuation models.

The Report must be read in its entirety. Individual sections of the Report, including the Executive Summary, could be misleading if considered in isolation from each other. In particular, the opinions expressed in the Report are based on a number of assumptions and qualifications which are set out in full in the Report.

Introduction

We have been requested by James Hardie Industries NV (“James Hardie”) to provide our actuarial assessment of the asbestos-related disease liabilities of the Medical Research & Compensation Foundation (“MRCF”) as at 30 June 2004 on a central estimate basis. The central estimate liability represents the present value of our actuarial estimate of the expected future asbestos-related claims payments and associated costs (including legal and settlement costs) of the MRCF.

We note that this liability assessment does not include any explicit allowance or risk margin for the uncertainty surrounding the assessment made. This is discussed further under the "Uncertainty" heading below.

Liability Assessment

At 30 June 2004, our central estimate of the liabilities of the MRCF is $1,536.0m (2003: $1,573.4m). This figure is discounted and is net of insurance recoveries.

Table E.1: Comparison of net costs: June 2003 to June 2004

	June 2003 $m	June 2004 $m
Total projected cashflows in current dollars	1,412.8	1,615.6
Future inflation allowance	1,990.3	1,970.0
Total projected cash-flows with inflation allowance	**3,403.1**	**3,585.6**
Discounting allowance	(1,829.6)	(2,049.6)
Net present value liabilities	**1,573.4**	**1,536.0**

We note the net present value liabilities comprise a gross amount before insurance of $1,732.6 million (2003: $1,734.2 million) and an insurance value of $196.6 million (2003: $160.8 million). The insured Workers Compensation liabilities are not included in either the gross or net figures.

Comparison With 30 June 2003 Valuation

In the absence of any changes to assumptions from our 30 June 2003 valuation, other than the discount rate, we would have projected a central estimate liability assessment of $1,440.4m as at 30 June 2004. Consequently, our revised assessment in this report represents an underlying increase in the liabilities of $95.6m.

This is reflected in the total projected cash-flows in the above table (inflated, pre discount) that have increased by $183m (from $3,403m to $3,586m) or 5% since the last valuation at 30 June 2003. This is in addition to the actual payments in the interim period that have been approximately $60m.

The increases in the underlying cash-flows and the liabilities are principally a consequence of:

- An increase in the projected future numbers of claims which we have adopted based on the recent emerging experience (see further discussion below); and
- A lower assumed average cost per claim based on recent trends which partly off sets the increased numbers of claims (see further discussion below).

A breakdown of the components of the overall changes are summarised in Table E.2.

Table E.2: Analysis of change: June 2003 to June 2004

	Change in Liability $m	Liability at June 2004 $m
Expected liability from June 2003		**1,576.7**
Change in discount rate		(136.3)
Expected liability adjusted for current discount rate		**1,440.4**
Impact of Change in:		
- Peak Year of claims	16.0	
- Claim numbers	295.7	
- Nil settlement rate	20.8	
- Emerging experience relative to IBNR claims for 2004/05 year	(28.9)	
- Claims average costs	(110.8)	
- Legal average costs	(55.7)	
- Settlement delay pattern	(8.5)	
- Insurance contracts effect	(32.7)	
- Bad debt on insurance recoveries	23.4	
- QBE contract not previously included within actuarial valuation	(23.7)	
Total development in liability at 30 June 2004	**95.6**	**95.6**
Liability at 30 June 2004		**1,536.0**

Emerging Experience

There has been a significant increase in the rate of mesothelioma claim notifications in the 2004/05 financial year (running from 1 April 2004 to 31 March 2005). They have risen from 185 in the 2003/04 year to 231 in 2004/05 (projected full year). This increase has mainly arisen from Victoria and Western Australia.

Asbestosis has shown a similar trend with claims notifications increasing from 97 in 2003/04 to 118 in 2004/05 (projected full year). This trend has arisen across most States.

It is unclear as to the extent to which this is a new sustained trend, a short-term aberration owing to increased consumer awareness and association of James Hardie with asbestos, or simply a one-off resulting from increasing publicity arising from the Special Commission of Inquiry.

The trend in average costs on these additional claims is also not yet clear and as such there remains uncertainty about the impact of this aberration in the longer term.

Given the lack of clarity as to the cause and/or permanence of these recent trends, we have taken the prudent course of allowing for these trends and have increased our liability assessment accordingly.

Superimposed inflation and legal costs

The legal costs components and the allowance for superimposed inflation are key drivers of the ultimate claims costs and are important measures to consider. Table E.3 below identifies the components these represent of the net liability.

Table E.3: Breakdown of components of liabilities

	Liability at June 2003	Liability at June 2004
Claim costs (excl. all legal costs and superimposed inflation)	$906m	$896m
Total legal costs (plaintiff and defendant costs)	$432m	$410m
Superimposed inflation: claims costs	$235m	$230m
Total Liability	**$1,573m**	**$1,536m**

Based on the above figures, legal costs amount to 26.7% [= 410/1,536] of the total costs of the liabilities, or 36.4% [= 410/1,126] of the average claimant award (before any further disbursements by claimants to their solicitors).

Superimposed inflation contributes $230m to the projected claim costs.

In aggregate, legal costs and superimposed inflation make up 42% [= 640/1,536] of the total costs and liabilities of the MRCF.

Uncertainty

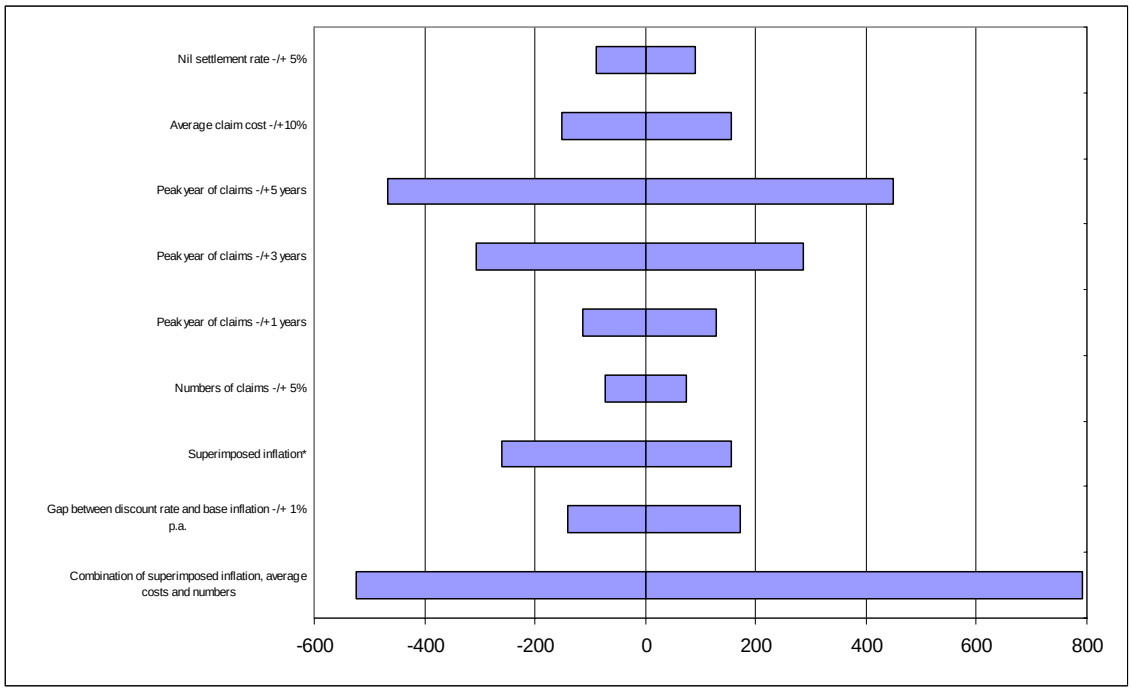
Estimates of asbestos-related liabilities are subject to considerable uncertainty. This includes uncertainty due to:

- The lack of confidence as to the extent and pattern of past asbestos exposures and therefore the number and pattern of the ultimate number of lives that may be affected by asbestos-related diseases.
- The fact that the ultimate severity of the impact of the disease and the quantum of the claims that will be awarded will be subject to the outcome of events that have not yet occurred, including medical and epidemiological developments, jury decisions, court interpretations, legislative changes, public attitudes, potential third-wave exposures and social/economic conditions such as inflation.

It should therefore be expected that the actual emergence of the liabilities will vary, perhaps materially, from any estimate. Thus, no assurance can be given that the MRCF's actual liabilities will not ultimately exceed the estimates contained in this report and that any such variation will not be significant.

To this extent, we provide the following sensitivity tests of the actuarial assessment of the liabilities to changes in some key assumptions.

Figure: E.1 Sensitivity testing results – Adjustments around the central estimate (in $m) at June 2004



* The superimposed inflation sensitivity tests are for 6% per annum for 5 years reducing to 2% per annum; and 2% per annum for 5 years reducing to –2% per annum

Whilst our combined sensitivity test of a number of factors (including superimposed inflation, average claim costs and numbers of claims) indicates a range around the central estimate of liabilities of -$500m to +$800m (equivalent to a range of liabilities of $1.0bn to $2.3bn), the actual cost of liabilities could fall outside that range depending on the out-turn of the actual experience.

Data, Reliances and Limitations

We have based our actuarial analysis and valuations on data and information provided by the MRCF and Litigation Management Group ("LMG"). This included:

- MRCF claims database at 18 October 2004 with individual claims listings; and
- MRCF accounting database at 18 October 2004 (which includes individual claims payment detail).

We have also considered the claims data listing at 30 June 2003 which formed the basis of our valuation at that date.

While we have tested the consistency of the various data sets provided, as noted above we have not otherwise verified the data and have relied on the data provided as being reliable, complete and accurate in all material respects. Consequently, should there be material errors or incompleteness in the data, our assessment could be affected materially.

We have allowed for the benefits of the MRCF's insurance arrangements based on our understanding of these. This has been based on a review of the insurance contract information submitted by various parties to the Special Commission of Inquiry. We have not independently examined the underlying contracts.

As noted in the main body of our report there are areas of potential asbestos-related liabilities that have not been included within our valuation. These principally related to events and exposures that, at this time, are unquantifiable and/or speculative in nature, such as “third wave” claims, property or environmental remediation or unpredictable developments in judicial processes or avenues of claim. The implications of this limitation should be acknowledged in considering our valuation.

Executive Summary Not Report

Please note that this executive summary is intended as a brief overview of our report. To properly understand our analysis and the basis of our liability assessment requires examination of our report in full.

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APPENDICES

1. SCOPE AND PURPOSE

Legal Disclaimer

This valuation report ("the Report") has been prepared by KPMG Actuaries Pty Limited (A.B.N. 77 002 882 000) for the sole use of the participants in negotiations between James Hardie Industries NV, the ACTU and the Asbestos Victims Group in relation to the management, administration and settlement of asbestos-related claims. The Report is not intended to be used for any other purpose and may not be suitable for any other use. Opinions and estimates contained in the Report constitute our judgement as of the date of the Report and are subject to change without notice.

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The Report must be read in its entirety. Individual sections of the Report, including the Executive Summary, could be misleading if considered in isolation from each other. In particular, the opinions expressed in the Report are based on a number of assumptions and qualifications which are set out in full in the Report.

1.1 Introduction

In February 2001, the Medical Research & Compensation Foundation ("MRCF") was established as a charitable trust to meet the asbestos-related liabilities of two former subsidiaries of James Hardie Industries NV ("James Hardie"), namely Amaca Pty Ltd (formerly JH&Coy) and Amaba Pty Ltd (formerly Jsekarb). We refer to these collectively as "the MRCF" even though this may not be strictly correct in some cases.

Subsequently, the liabilities of the MRCF were assessed by Trowbridge Deloitte ("Trowbridge") as $324m in February 2001 rising to $1,090m at 30 June 2003.

KPMG Actuaries Pty Ltd ("KPMG Actuaries") was retained by James Hardie and Allens Arthur Robinson to provide an independent assessment of the asbestos-related liabilities of the MRCF at 30 June 2003.

Within our valuation as at 30 June 2003, KPMG Actuaries estimated the discounted value of the quantifiable liabilities of the MRCF on a "central estimate" basis as $1,573.4m, based on the then current economic and legal environment, net of insurance recoveries and after allowance for legal costs.

1.2 Purpose of this report

KPMG Actuaries has been retained by James Hardie to provide an updated central estimate valuation of the asbestos-related liabilities of the MRCF for the sole purpose of use in negotiations between James Hardie, the ACTU and the Asbestos Victims Group, in relation to the management, administration and settlement of asbestos related claims. The prior written consent of KPMG Actuaries is required for any other use of this report or the information contained in it.

Our valuation is intended to be effective as at 30 June 2004, but has been based on the most recent emerging information to 18 October 2004. As such, the valuation contains a degree of hindsight. Owing to the nature of the data provided, we are not able to exclude this additional data from our considerations.

The Medical Research and Compensation Foundation, Amaca Pty Limited and Amaba Pty Limited are not responsible for, and did not request, the preparation of this report.

Nonetheless, the MRCF have requested to see, and will be provided with, a copy of this report.

1.3 Scope of report

We have been requested by James Hardie to provide an actuarial assessment of the estimated asbestos-related disease liabilities of the MRCF as at 30 June 2004 on a central estimate basis. This involves an estimate of the expected value of the future claims and associated costs liabilities.

It is of note that our liability assessment:

- Relates to the MRCF.
- Considers the potential liability in relation to ABN60.
- Relates only to the future liability outworkings of liabilities of a type and character incurred by the MRCF to date. It does not include any allowance for speculative areas of future claims, such as "third wave"

claims, property or environmental remediation or unpredictable developments in judicial processes or avenues of claim.

- Relates to a continuation of existing legal environment.

This report is an update and extension of the work performed by KPMG Actuaries for the Special Commission of Inquiry as set out in the Expert Witness Report filed with the Commission on 7 June 2004 ("Exhibit 252", "The Wilkinson Report"). As such, this report is supplementary to that report.

Readers of this report should refer to the Wilkinson Report where necessary for relative comparisons. The Wilkinson Report, amongst other matters, contained the results of the assessment as at 30 June 2003.

If the readers of this report require further background on the portfolio and its claims experience or other associated commentary, we suggest that they refer to the Wilkinson Report.

1.3.1 Workers Compensation

We note that the scope of our valuation excludes the insured component of James Hardie's employees' Workers Compensation liabilities in relation to asbestos-related disease claims. The data available from the MRCF does not include sufficient details for us to make an assessment of these insured liabilities.

This does not impact our net liability assessment as set out in this report. However, it is noted that the gross liability before insurance, and the insured liability offset, are "technically" understated by the amount of these particular insured liabilities.

1.3.2 ABN60 Liability

Overall our current assessment is that the asbestos-related disease liabilities of ABN60 are immaterial. We have formed this view based on the following considerations.

While 86 claims were filed between 1985 and 2002, of this there were 3 claims filed in 2001 and 1 in 2002. We are advised that the majority of any attempted claims against ABN60 have been in relation to:

- Claims by former employees of JHIL employed prior to 1937;
- New Zealand claims;
- Cross-claims by Pacific Power;
- Claims from Baryulgil; and
- Other cross-claims

We understand many of these claims (particularly from New Zealand, Pacific Power and Baryulgil) have not been successful against ABN60. In terms of employee claims the last date of exposure should be 1937.

Given the above, the remaining claims liability would seem unlikely to be material within the overall scope of the liability determination of this report.

Nonetheless, we do note recent press reports regarding CSR investigating the possibility of joining ABN60 on the grounds of owing a duty of care and the issuance of a subpoena for information. We have not attempted to quantify the potential impact of this as it is still subject to legal consideration, and in any event, it is not obvious the extent to which ABN60 could be joined and what share of the cost ABN60 would take, or from whom that share would be taken.

1.4 Professional standards and compliance

This report details a valuation of the outstanding claims liabilities of an entity which holds liabilities with similar features to general insurance liabilities as a self-insured entity, and which also has purchased related insurance protection.

This report complies with Professional Standard 300 of the Institute of Actuaries of Australia ("PS300" - "Actuarial Reports and Advice on General Insurance Technical Liabilities"). The effective date of the current version of this Professional Standard is April 2002.

1.5 Areas of potential exposure not included

As identified in Section 1.3, there are many other potential sources of claims exposure beyond those directly considered within this report. However, many of them are possible, but by no means certain, and in a number of cases are unquantifiable even if we believe they may generate claims. This is especially the case for those sources of claim where there has been no evidence of claims to date.

Areas of potential claims exposure we have not explicitly allowed for in our valuation include:

- US exposures;
- Further development in relation to NZ exposures and the rights of claims from NZ claimants in Australian courts;
- Future significant individual landmark and precedent-setting judicial decisions;
- Significant medical advancements;

- Property or site remediation costs;
- Unimpaired claims, i.e. claims for fear, stress or psychological illness;
- A proliferation of "third-wave" claims;
- Potential statutory claw-back from the Dust Diseases Board or other Workers Compensation schemes;
- Changes in legislation, especially those relating to tort reform for asbestos sufferers;
- Introduction of new, or elimination of existing, heads of damage;
- Changes in the awards for asbestos-related diseases for claimants who have smoked;
- Any changes to GST or other taxes; and
- Future bankruptcies of other asbestos claim defendants (i.e. manufacturers or distributors).

In some of these cases, some implicit allowance is arguably made in the allowance for superimposed inflation.

We discuss these matters further in Section 3.

1.6 Reliance and limitations

KPMG Actuaries has relied upon the reliability, accuracy and completeness of the data with which it has been provided. KPMG Actuaries has not verified the reliability, accuracy or completeness of the data, although we have undertaken certain steps to ensure its consistency with data previously received. However, KPMG Actuaries places reliance on the data previously received, and currently provided, as being reliable, accurate and complete in all material respects.

It must be understood that estimates of asbestos-related liabilities are subject to considerable uncertainty, due to the fact that the ultimate disposition of claims incurred prior to the valuation date, whether reported or not, is subject to the outcome of events that have not yet occurred. Examples of these events include jury decisions, court interpretations, legislative changes, epidemiological developments, medical advancements, public attitudes, potential third-wave exposures and social/economic conditions such as inflation.

It should therefore be expected that the actual emergence of the liabilities would vary, perhaps materially, from any estimate. Thus, no assurance can be given that the companies' actual liabilities will not ultimately exceed the estimates contained herein and that any such variation will not be significant.

Nonetheless, we provide our best estimates based on our expectations of future such events.

Limitations in relation to the scope, resulting from those areas of potential exposure which we have not included within our valuation, also exist. However, these are limitations which we have imposed upon the valuation given the unquantifiable nature of a number of these events. We believe the approach we have taken is consistent with standard Australian and international actuarial practice in this regard.

Our assessment of the asbestos claims liabilities of the MRCF does not have regard to the way the liabilities may be funded by the MRCF or James Hardie. Depending on how the liabilities are funded or financed, including the earnings experience of any assets held to back the liabilities, the ultimate cost of meeting the liabilities may vary significantly from the liability amounts shown in this report.

1.7 Distribution and use

The purpose of this report is as stated in Sections 1.2 and 1.3. This report should not be used for any purpose other than those specified.

This report is provided to the Board of James Hardie and the Steering Committee appointed by the Board. We also understand this report will be provided to other professional advisers to James Hardie, including Caliburn Partnership and Allens Arthur Robinson. KPMG Actuaries provide our consent for this report to be made available to these parties.

KPMG Actuaries notes that this report is to be provided to the Directors of the MRCF, the ACTU, Mr Bernie Banton as the designated representative of the Asbestos Victims Group, the Labour Council of NSW, and the NSW Government representatives on a confidential basis.

To the extent permitted by law, KPMG Actuaries will not be responsible to third parties for the consequences of any actions they take based upon the opinions expressed within this report or any use of or purported reliance upon this report not contemplated in sections 1.2 and 1.3.

Where distribution is permitted, the report should only be distributed in its entirety and judgements about the conclusions and comments drawn from this report should only be made after considering the report in its entirety and with necessary consultation with KPMG Actuaries.

2. EXPOSURE HISTORY OF JAMES HARDIE'S FORMER SUBSIDIARIES[1]

2.1 Overview

In 1916, James Hardie opened its first asbestos factory at Camellia in Sydney. Between 1916 and 1987, James Hardie and its subsidiaries produced and developed a variety of products including:

- Asbestos cement pipes;
- Asbestos cement sheeting and building products;
- Lagging and other insulation products; and
- Brake linings and other friction products.

2.2 Mining activities

A James Hardie subsidiary, Asbestos Mines Pty Limited, owned and operated a small chrysotile (white asbestos) mine at Baryulgil NSW until its sale in 1975. However the total output of the mine was limited.

Consequently, the extent of James Hardie's exposure to claims related to mining, and the potential for "double exposures" is somewhat limited.

2.3 Asbestos cement

Production of asbestos cement leased products was JH&Coy's primary business. The products it produced came in the form of building products and asbestos cement pipes.

Production of asbestos cement pipes began in 1926 but the use of asbestos cement pressure pipes for water and sewerage use did not become widespread until autoclaving of pipes was introduced in the early 1950s.

Prior to the mid-1980s, JH&Coy manufactured asbestos cement flat and corrugated sheets for internal and external wall cladding in buildings and for roofs, and asbestos cement water and sewer pipes.

The major fibre used in the manufacture of asbestos cement products was chrysotile.

[1] This section is substantially based on a paper submitted to the Special Commission of Inquiry and was included as the Special Commission of Inquiry Appendix J, Paper entitled "James Hardie and Asbestos" (15 January 2001) prepared by Mr Wayne Attrill

Amosite (brown asbestos) was not used in JH&Coy products until the 1950s, and small quantities of amosite continued to be used in asbestos cement products until about 1980.

JH&Coy also used crocidolite (blue asbestos) in pressure pipes and building products that were not able to be seen in detail, such as roofing products from the mid-1950s until about 1968. The crocidolite was sourced from the CSR mine at Wittenoom.

Asbestos content of pipes was approximately 15% of which about 12% was chrysotile and the remainder amosite. During the period 1956–1968, crocidolite was also used (about 2%).

The asbestos content of JH&Coy's asbestos cement sheet ranged from 8% to 15%, and was predominantly chrysotile with small amounts of crocidolite (to 1968) and amosite.

2.4 Insulation products

Asbestos containing insulation products were first manufactured by JH&Coy in the 1930s, and by the 1950s JH&Coy had established itself in the market with a product called 85% Magnesia.

In 1964 JH&Coy formed a joint venture with CSR and Bradford Insulation known as Hardie-BI Company to make and market insulation products.

Major products produced were 85% Magnesia and K-Lite. Both products contained about 15% amosite. The partnership was dissolved in 1974 and JH&Coy ceased production of asbestos thermal insulation products at that time.

2.5 Brake linings

JH&Coy had initially entered the brakes and friction products market in the early 1930s and had a well-established business by 1950 under the brand name "Five Star".

In 1963 JH&Coy entered into the Hardie-Ferodo joint venture with Ferodo of the UK. Hardie-Ferodo carried out considerable product development work, particularly with regard to railway rolling stock brakes. The partnership dissolved in 1978 and the business was renamed Better Brakes (and later became known as Jsekarb).

Jsekarb manufactured brake linings for motor vehicles, railway wagons and locomotives, and ceased using asbestos in their manufacturing process in 1987.

The only asbestos used in friction products was chrysotile.

3. AREAS OF POTENTIAL EXPOSURE

3.1 Overview

In Section 1.5, we identified some sources of exposure and uncertainty that may not explicitly, or implicitly, be factored into our valuation. The impact of the emergence of these might be to increase, or decrease, the future number of claims or the overall costs in relation to the liabilities of the MRCF.

3.2 Changes to the number of future claims

3.2.1 Overseas exposures

Currently the vast majority of claims against the MRCF have emanated from Australia and New Zealand.

To date, there have been 22 claims arising from the US. Of these, 17 have been settled for no award, with only 1 having had to bear any defendant legal costs in defence against the claim. Even then the costs were not substantial. We understand that these were speculative claims against James Hardie's US business and that liability was ultimately denied. Only 5 claims remain open presently. We understand no payment is expected to be made on these.

We have not therefore allowed for any material potential claims emanating from the US, although that is not to suggest no possibility exists of such claims arising.

The absence of any true claims to date makes estimation of the potential exposure, or determination of a central estimate of liabilities or a liability at higher probabilities of sufficiency, an impractical task.

We note that New Zealand claimants have, in a number of cases, attempted to bring their claims into Australia, and especially the NSW Dust Diseases Tribunal, in order to seek common law damages. We note these have had little success to date and it should also be noted that the number of New Zealand claims filed to date is quite small.

3.2.2 Third-wave claims

We have made some implicit allowance for the so-called "third-wave" claims. These are claims arising from home renovations or to builders involved in such renovations. Such claims are allowed for within the projections to the extent to which they have arisen in past data and to the extent our exposure model factors in such tertiary exposures in its extrapolation.

We have not explicitly allowed for a surge in such claims in the future arising from renovations, but conversely we have not allowed for a tempering of those third-wave claims included within our projection as a result of improved education of individuals of the risks of such home renovations, or of any local Councils or State Governments passing laws in this regard.

3.2.3 Property or site remediation claims from product liability exposures

We have not allowed for any costs associated with property or site remediation.

The exposures from this source are as yet unknown and there has so far been an absence of claims emerging from this source. As such, estimation of the liabilities arising from this source are unquantifiable at this time.

3.2.4 Unimpaired claims

We have not allowed for the admissibility of "unimpaired claims" within the Australian Court system, or for the admissibility of stress, psychological or fear claims. We recognise the current case of *Thompson vs. CSR* (NSWDDT 7/2003) where Mr Thompson made a claim for fear of contracting mesothelioma 14 years before onset. In this case, Judge O'Mealy ruled that the fear was not compensable although this is currently under appeal.

We have assumed that stress or fear from potential exposure, which is not accompanied by a disease, does not constitute a "claim for compensation".

We note the recent case in Western Australia concerning Arturo Della Maddalena, a past employee of CSR at Wittenoom mine. Mr Maddalena has successfully appealed for a claim for psychiatric illness resulting from his exposure, although he has not shown signs of having contracted a disease at present. It is understood that this is the first such case of an award for such illness without manifestation of the disease. However, this claim is not "unimpaired" given the nature of the psychiatric illness which Mr Maddalena has.

3.3 Changes to claims costs

3.3.1 Legal environment

We have not allowed for significant individual landmark legal cases arising in the future. However, within our allowance for superimposed inflation, future legal developments is one such factor underlying the allowance.

We have not explicitly allowed for the emergence of new heads of damage or the significant extension of current heads of damage, or for any overturn or restriction of heads of damage. However, allowance for this is in part also implicitly allowed for within our allowance for future superimposed inflation.

3.3.2 Potential future reforms

Our valuation assumes a continuation of the legal system (administratively and operationally) that is currently in place.

We are aware that there are ongoing discussions taking place between the ACTU and James Hardie in relation to introducing efficiencies into the existing Common Law System.

We also note the recent announcement on 18 November 2004 by the NSW Government of a "review to reduce legal and administrative costs in dust diseases compensation claims".

We have not made any allowance within this valuation for any cost savings emerging as a result of these efficiencies or the Governmental review.

At this time the framework remains in evolution and has not been finalised. The cost savings have not yet been fully identified or quantified. Given this, we have made no allowance for the impact of the future efficiencies.

3.3.3 Dust Diseases Board Reimbursement

We have not made any allowance for the potential for the NSW Dust Disease Board ("DDB"), or any other Workers Compensation scheme in other jurisdictions, to recover costs from Common Law defendants.

In respect of the NSW Dust Diseases Board, this is permissible under Section 8E (Reimbursement Provisions) of the Dust Diseases Act 1942.

It is our understanding that there is little evidence of this to date, although such occurrences are on the increase. That said, were this "claw-back" to be triggered, some components of the costs of the DDB and other State Workers Compensation schemes could be compensable by Common Law asbestos defendants, and therefore result in increased costs being incurred by the MRCF.

3.3.4 Smoking-related diseases

There have been some notable cases involving the emergence of lung cancers from people with asbestos exposure but who have also smoked cigarettes.

In McDonald v. State Rail Authority (1998) (16 NSWCCR 695), the judgement was that asbestos exposure did increase risk of lung cancer in the absence of asbestosis, but the judge ruled for the defendants in relation compensation.

In Judd v. Amaca, there have been further challenges to the McDonald decisions. We have continued to assume that the precedents set in Judd and McDonald will continue and that thresholds required to attribute lung cancer to asbestos exposure will be maintained.

3.3.5 Future bankruptcies

As bankruptcies occur, there is a concentration of the costs of claims amongst a decreasing pool of defendants. This would be expected to lead to an increase in the proportion of a claim borne by each of the remaining solvent defendants.

We have not allowed for the future failure of any substantial asbestos defendants, insurers or governments who bear a share of the liabilities within our central estimate assessment.

Such allowance would be too speculative both in identifying who might fail, and when such a failure might arise.

3.4 Implicit allowance

We have not allowed explicitly for the possibility of new emerging heads of damage, but it should be noted that the allowance for superimposed inflation has some regard to such matters arising from time to time.

It should also be noted that in respect of some of these items, i.e. legal and medical developments, there is both an upside and downside potential in respect of claims costs, and in such cases we have taken what we believe to be a central estimate.

Some of the potential sources of exposure, such as third-wave claims and emerging heads of damage, are captured implicitly to an extent within our projection of future notifications of claims and within the allowance for superimposed inflation.

In some cases, such as property remediation, we have not made any allowance. The cost emanating from this source might be in excess of that we have allowed for within our assessment (i.e. zero).

4. DATA

4.1 Data provided to KPMG Actuaries

We have been provided with the following information by the Medical Research & Compensation Foundation ("MRCF") and Litigation Management Group ("LMG"):

- MRCF claims database at 18 October 2004 with individual claims listings; and
- MRCF accounting database at 18 October 2004 (which includes individual claims payment detail).

Additional to this, we have been granted access to Mr Wayne Attrill, Managing Director of LMG, Ms Lynne Charles of LMG, and Mr Dennis Cooper, Managing Director of MRCF. They have made themselves available to provide insight into the data, answer questions that we have had in relation to the interpretation of the data, and to discuss trends in emerging experience and any matters of note arising during the most recent financial year which we have observed within the data.

We have allowed for the benefits of the MRCF's insurance arrangements based on our understanding of these. This has been based on a review of the insurance contract information submitted by various parties to the Special Commission of Inquiry. We have not independently examined the underlying contracts.

We have also considered the claims data listing at 30 June 2003 which formed the basis of our assessment at that date.

4.2 Data limitations

Subject to the limitations described in Section 1.6, the data is generally of good quality, in the sense that there are some useful fields that we often do not see collected within our wider experiences with other clients.

Certain data that would be very valuable to our analysis and liability assessment is not readily available. This includes:

- In relation to open claims, insufficient payment or case estimate history has been provided which would allow us to track the development, or otherwise, of historic case estimates. This would provide a "ground up" incurred claims assessment as a cross-check and input to our calculations.

- We have limited exposure history of James Hardie's products. This would help in assessing the pattern of future claims notifications arising from asbestos exposure and provide further support to the actuarial assessments.
- Claims costs are not split by individual component of award, i.e. heads of damage, which would enable increased understanding of the drivers of claim costs and inflation to individual award components (e.g. Sullivan vs. Gordon).
- There is no collection of other useful data such as date of diagnosis, which might indicate accelerations or slowdowns in filings of claims by plaintiff lawyers.
- Some of the date fields (e.g. date of birth, date of death) are not complete and these would allow better analysis to the actuarial valuation were they complete.
- There is currently no explicit flag in the data enabling identification of genuine third-wave claims, although we note that the MRCF has now begun collecting such data.
- In addition to these data restrictions, we note that the historic data changes from year to year. Sometimes this is due to re-designations, other times this is likely due to inherent operational processing delays which are common in all companies. Whatever the cause, this limits reliability of the emerging trends in claims experience.
- For example, there are movements in the historic rate of nil settlements, on older years, which is somewhat unexpected.

4.3 Data verification

While we have tested the consistency of the various data sets provided, we have not otherwise verified the data and have relied on the data provided as being reliable, complete and accurate in all material respects. We have relied upon the robustness of the MRCF's and LMG's operational processes and systems as to the completeness of the data provided.

We can provide no additional comfort as to the accuracy, reliability or completeness of the data. We have not performed any audit of the data or been given access to the information required to do so, nor are we aware of any other such audit being undertaken. Consequently, should there be material errors or incompleteness in the data our assessment could also be affected materially.

All readers of this report should understand that our valuation can only be interpreted in light of this assumption that the data is reliable, complete and accurate.

4.3.1 Reconciliation with previous year's data

The data is effective as at 18 October 2004. However, the data has been updated over time, as more information comes to light, or through the correcting of any errors emerging. As such, the validation of the data with a previous year can provide some anomalies.

By way of example, there are some movements in the notification date of claims, in the disease diagnosed and in the date of settlement of claims. We have identified these changes and considered the extent of their impact on the data. In aggregate, we regard the data as materially appropriate for its intended use.

4.3.2 Reconciliation between claims and accounting databases

We have compared the claims awards, the legal costs and the recoveries amounts between the claims database and the accounting database from the earliest date to the current file position. Table 4.1 shows the results of this reconciliation for all claims to date.

Table 4.1: Comparison of results from claims and accounting databases

	Claims database $m	Accounting database $m	Difference $m
Client component of award settlement	283.6	265.3	18.3
Legal fees	48.6	62.7	(14.1)
Award and legal fees	332.2	328.0	4.2
Recoveries	(5.0)	(28.0)	(23.0)
Net claims	327.2	299.9	(18.8)

It can be seen that there are some differences in the values extracted from the accounting database and from the claims database.

In relation to recoveries, the accounting database holds both insurance and non-insurance recoveries whilst the claims database does not include insurance recoveries.

In relation to legal costs, the differences appear to be a consequence of the accounting database being more up-to-date and might also reflect a difference in the allocation between legal and non-legal costs within the two databases.

In relation to claims awards, this again might be a consequence of the mechanism by which costs are divided in relation to plaintiff legal costs.

Our approach has been to take the maximum value of the two databases for each claim record. This approach is likely to result in some prudence in overall analysis.

4.4 Data interpretation and analysis

As this is our first formal valuation of the liabilities, we have discussed at some length below our approach to analysing the data and issues in relation to categorising and characterising the claims.

Claims included as reported claims

The following claims have been excluded from the main claims file:

- Wharf claims. These are defined as claims where the occupation or the exposure fields include reference to "wharf", "waterside" or "stevedore" or derivations thereof. These are analysed separately.
- Cross-claims issued **by** James Hardie or the MRCF to other entities for contribution to the claim. These are not claims, unless the cross-claim is on the master claim, but rather are operational actions stemming from a claim.
- Claims with a blank report year.

We have included claims which arise as cross-claims against James Hardie or the MRCF, and have also included multiple claims filed against James Hardie or the MRCF from the same event.

Defining claim status

A claim has three potential stages of settlement:

- The plaintiff settling their award ("plaintiff settlement date");
- The MRCF settling their share of the award ("client settlement date"); and
- The MRCF finalising their legal costs ("client closure date").

We have used the following terms to describe the advancement through these three stages:

- Open: none of the 3 settlement date fields have information in them.
- Unsettled: the plaintiff has settled their award, but James Hardie or the MRCF has **not** settled their share of the award and **not** finalised their legal costs. No aspect of the claim is settled or closed from the perspective of James Hardie or the MRCF. However, some information is available as to the total settlement which acts as a maximum liability amount.
- Settled: the plaintiff has settled their award **and** James Hardie or the MRCF has settled their share of the award. James Hardie or the MRCF has **not** finalised their legal costs. Only legal costs remain to be finalised.
- Closed: the plaintiff has settled their award, James Hardie or the MRCF has settled their share of the award **and** finalised their legal costs. This claim is finalised in all respects.

Settlement costs and average costs

For those claims which are open, the case estimates provide an indication of the quantum for which such claims may settle. Where available, we make use of the case estimates but where none are available, we treat these claims in the same manner as IBNR claims in relation to the assumption of average costs.

For unsettled claims, we have the overall settlement amount as an upper bound, and the case reserve as a further indicator. We add an assumed level of legal costs to these claims to arrive at the liability.

For claims which have settled but not closed, we use the additional legal costs from the accounting database to estimate their closed value. These claims will be closed on the accounting database. We quantify later in this report the magnitude of this component.

For closed claims, there is no need for any liability.

In determining the average historic claim settlements, the average award component is calculated as the total cost on closed or settled claims divided by the number of claims in these categories.

In determining the average historic defendant legal costs, it is calculated as the total defendant legal cost on closed claims divided by the number of claims closed.

We have, however, considered the results of each of the analyses on the three settlement year definitions as described in Section 5.6 in forming our view on the prospective average costs.

Insurance recoveries

We searched the description field in the accounting database for the incidence of the word "insurance" to allocate a recovery as an insurance recovery.

As a consequence it may be that some insurance recoveries might have been over-stated or under-stated, if the description field does not refer to the word insurance but the payment is in fact an insurance payment. We have no way of identifying this based on the information we have available. This also therefore affects the implied non-insurance recoveries derived from the accounting database.

The financial impact of this potential discrepancy is likely to be small given that the total recoveries are of the order of $28m and that we allocated some $23m to insurance and some $5m to non-insurance recoveries (based on the use of the claims database for the non-insurance recoveries).

Cross-claims

A cross-claim can be made by another company against the MRCF ("against" cross claims) or by the MRCF against another company ("by" cross claims).

A cross-claim recovery from a "by" cross-claim is already shown in the master claim. As such, we neither need to count "by" claims in the reported claim count nor their cost in the settlement.

We have therefore excluded "by" cross-claims from the analysis, unless they are the master claim.

We have valued the average "by" claim recovery as a percentage of the award based on historic experience.

Categorising a disease

For many claims, there are a number of diseases listed in the disease description.

For the purposes of our analysis, we must allocate each claim just once and therefore to one disease. We have selected the following order of priority, based on the relative severity of the disease:

- Mesothelioma;
- Lung cancer;
- Other cancer;
- Asbestosis; and then
- ARPD and Other.

This means that if a claim has mesothelioma as one of its listed diseases, it is automatically included as a mesothelioma claim. If a claim has lung cancer as one of its listed diseases (but not mesothelioma), it is included as a lung cancer claim. If a claim has asbestosis as one of its listed diseases, it is only coded as asbestosis if it has no reference to mesothelioma, lung cancer or other cancer as one of its diseases.

The previous working assumption, based on the prior Trowbridge work, was to order the asbestosis claims before the lung cancer claims. As a consequence our historic numbers, as we now report them, will have changed between the previous valuation and this valuation.

5. VALUATION METHODOLOGY AND APPROACH

5.1 Previous valuation work and methodology changes

Our previous analysis was conducted with respect to the Special Commission of Inquiry and was performed for two purposes:

- To provide James Hardie with an independent assessment of the work undertaken by Trowbridge Deloitte; and
- To provide an estimate of the liabilities we would have determined at various points in time if we had undertaken the work and what we felt would have been reasonable for an actuary to determine.

In undertaking this work, KPMG Actuaries had no access to data other than that which Trowbridge presented to the Commission in the form of CDs of data and spreadsheets. Furthermore, we had no access to staff or consultants of the MRCF or LMG to better understand that data, or how it should be interpreted. Consequently, we performed a "desk-based" valuation involving a review of the reasonableness of Trowbridge's methods and assumptions.

In those circumstances, we did not materially revise the methodology or data analysis except in a limited respect.

Within our current assignment, we have been given access to considerably more data from LMG to facilitate our work.

In analysing the data now available to us and how the data behaves from an operational perspective, we have identified a number of changes to the methodology, which we feel are required to establish an estimate of the liabilities which in our view is most robust and reflective of that data.

The impact of changing the methodology is that some of the tables presented in the previous report cannot now be compared to directly, as the nature of the new analysis has changed the presentation of the data and some of the definitions we have used.

Nonetheless, we have separately replicated the previous methodology for the purposes of producing tables corresponding to those in the previous report. We have not reviewed critically each assumption that would flow from that analysis, but we have used this work to assess in broad terms the financial impact of the methodology changes.

5.2 Overview of current methodology

The methodology we have used for valuing the MRCF's asbestos-related liabilities is best described as an "average cost per claim method". This method involves the derivation of the future number of notifications and settlements of claims and the average cost of those settlements, allowing for inflation, and multiplying the two together to arrive at an expected cashflow. This analysis is performed on data which is gross of insurance recoveries and gross of third-party or subrogation recoveries.

We then make an allowance for the recoveries from non-insurance contracts, i.e. the "by" cross claims.

An allowance for insurance recoveries is made to establish the net cashflows, which are then discounted to current money terms.

The liabilities are established on a central estimate basis. This means there is no "buffer" or "margin for uncertainty" included within the assessment.

In all our analyses, the "year" we refer to runs from 1 April to 31 March, so that a 2004 claim would be a claim notified in the period 1 April 2004 to 31 March 2005. Similarly a 2003 settlement would be a claim settled in the period 1 April 2003 to 31 March 2004.

5.3 Disease type and class subdivision

It is critical when modelling the future liabilities to sub-divide the data into groups which exhibit similar characteristics, i.e. into homogeneous groups.

As with our most recent valuation, we have sub-divided the claims into:

- Product & Public Liability;
- Workers Compensation;
- Wharfside Workers; and
- Cross-claims

We have separated out wharf claims because of their significantly different claim sizes to other classes.

We have separated the Workers Compensation claims because they arise from the payment of self-retained costs on claims relating to pre-1956 exposures (i.e. similar to a deductible). Furthermore, such payments are not subject to insurance protection and in order to apply the insurance programme to the future cashflows, we need to segregate them from the product and public liability claims. We have not divided this data further owing to the financial significance and the credibility of the data if sub-divided by disease type.

For product and public liability, we have separately considered the individual disease types. We have split the data by disease because it displays substantially different average claim sizes and because the incidence pattern of future notifications is also expected to vary considerably between the different disease types. As product and public liability are financially significant to the overall total of the liabilities, the sub-division by disease type is appropriate. We have sub-divided this portfolio into:

- Mesothelioma;
- Lung cancer and other cancer (hereafter referred to as "lung cancer");
- Asbestosis; and
- Asbestos-Related Pleural Disease and Other ("ARPD"), including Pleural Plaques.

We have considered the claim settlement and legal cost components separately within each of these sub-divisions.

As noted in Section 1.3.1, we have not considered the Workers Compensation claims arising from the MRCF which have been insured. We have assumed that the insurance contracts will continue to respond to future claim notifications arising out of past exposures.

5.4 Numbers of future claims notifications

We begin by first estimating the incidence of future notifications of claims.

We have based this on the use of what we have termed an "exposure model", which we have constructed in relation to Australian usage of asbestos.

We do not have individual exposure information for James Hardie, its products or where the products were used and how many people were exposed. However, given the relative market share of James Hardie over the years, the use of a national pattern of usage is a reasonable proxy.

We start by constructing an index from the annual consumption of asbestos by Australia from 1900-2000.[2] We split this between the various asbestos types and by year of consumption.

We have not allowed for double exposures on any of the various asbestos processes. This would relate to when both mining and milling were performed. Our understanding is that there was some (moderate) mining at Baryulgil, but in relative terms to the exposure of the MRCF, it is not significant.

[2] US Geological Survey – Worldwide Asbestos Supply and Consumption Trends 1900 to 2000; Robert L. Virta (2003)

With the exposure index that we have derived, we then need to allow for the latency period from average date of exposure to claims notification.

The latency curve for mesothelioma is assumed to be normally distributed with an average latency of 35 years and a standard deviation of 10 years. This appears to be generally supported by Professor Berry et al's analysis[3], by Jim Leigh et al's report[4] and a paper by Yeung et al[5].

From the exposure index and the latency distribution, we produce an index of the number of notifications, and this provides the basis, for mesothelioma claims, of the implied peak year of notifications and the shape of the notifications.

For the other claim types, we adjust the curve for different assumed peak years, consistent with those diseases having different average latency periods to that of mesothelioma.

These curves only provide an index, or "shape", not the actual numbers of claims.

We project the future number of notifications by taking into account the actual notifications in the most recent years and projecting the annual future claims by reference to the claims notification index.

We then need to recognise that the "IBNR" claims for the year 2004/05 from this projection are not the IBNR claims at 18 October 2004, as 6.5 months (1 April 2004 to 18 October 2004) of claims have already been notified and included within the pending claims for the 2004/05-year. The "true IBNR" claims for 2004/05 are thus equal to the current expected number of future claims per month multiplied by 5.5.

5.5 Numbers of claim settlements from future claim notifications

We derive a settlement pattern by considering triangulations of the numbers of settlements by delay from the year of notification.

From this settlement pattern, we can project the pace at which claims notified in the future will settle, and use this to project the future number of settlements in each financial year.

[3] Malignant pleural and peritoneal mesotheliomas in former miners and millers of crocidolite at Wittenoom, Western Australia; G Berry, N H de Klerk, et al (2004)

[4] Malignant Mesothelioma in Australia: 1945-2000; J. Leigh et al (2002)

[5] Distribution of Mesothelioma Cased in Different Occupational Groups and Industries, 1979-1995; P. Yeung, A. Rogers, A. Johnson (1999)

We apply a "nil settlement rate" to the overall number of settlements to estimate the number of claims which will be settled for nil claim cost and those which will be settled for a non-nil claim cost.

The prospective nil settlement rate is estimated by reference to past trends in the rate of nil settlements.

5.6 Average claim costs of IBNR claims

We need to separately consider average settlement costs in respect of the claim and the average legal cost of the defendant.

In essence there are the following six components to the average cost assessment:

- Average award (sometimes including plaintiff legal costs) of a non-nil "attritional" claim.
- Average plaintiff legal costs of a non-nil "attritional" claim.
- Average defendant legal costs of a non-nil "attritional" claim.
- Average plaintiff legal costs of a nil "attritional" claim.
- Average defendant legal costs of a nil "attritional" claim.
- Large claim awards and legal cost allowances.

We define a large claim as those for which the award is greater than or equal to $1m in current money terms. We define an attritional claim as a non-nil, non-large claim. We define a nil claim as one for which the award payable by the MRCF is zero.

The data provided to us has three settlement year definitions:

- Plaintiff settlement year;
- Client settlement year; and
- Client closure year.

We have analysed the average settlement cost by each of the three settlement year definitions in arriving at our assessment of the prospective average settlement cost.

All of our analyses have been constructed using past average awards, which have been inflated to current money terms using an earnings inflation index. This compensates for basic inflation effects when identifying trends in historic average settlements. We then determine a prospective average cost in current money terms.

We perform the same exercise for the plaintiff's legal costs and the MRCF's legal costs.

This process is repeated for nil claims.

We have not allowed for any further internal claims administration costs, as our understanding is that a considerable amount of the work is outsourced.

In relation to the large claims loading, we analyse the historic incidence rate of large claims, and the average claim and legal costs of these claims. We have determined a prospective incidence rate and average cost in current money terms to arrive at a loading per claim (being the average cost multiplied by the incidence rate per claim). This "per claim" loading is then added to the attritional average cost to arrive at an overall average allowing for the infrequent incidence of large claims.

Allowance for future inflation, being both base inflation and superimposed inflation, is made. This enables us to project future average settlement costs in each future year, which can then be applied to the IBNR claims as they settle in each future year.

5.7 Pending claims

At this valuation, our approach to valuing pending claims has been enhanced. At the last valuation, we treated all claims which had not been "settled" as open. Given the date available, all open claims were then treated in the same manner as an IBNR claim, i.e. in the absence of any known information about these claims.

At this valuation, we have been given access to case estimate information on individual pending claims and have made use of this extra case estimate and reserve information on these claims in assessing the liabilities for pending claims.

We have considered all claims not closed at 18 October 2004 as having some potential to have future costs assigned against them, be it legal costs or further award payments.

As we have previously indicated, we have adopted 3 definitions of settlement status.

When there is no closure date but the claim has a settlement date, there is a possibility of further emerging defendant legal costs, even though the claim award has been settled.

When there is no settlement date, there is a possibility of award, plaintiff legal costs and defendant legal costs still being incurred.

Understanding this process means that we can model, for each claim not yet closed, sources where further costs could be incurred. Combining this with case estimate history or total award settlement information, where known, allows us to more directly model the liability for pending claims.

The excess amount of the liability for pending claims, over the case estimates held, is what actuaries term Incurred But Not Enough Reported ("IBNER").

It is sometimes the case that there is redundancy in case estimates (i.e. where they are set on a very conservative basis) and that IBNER is negative. However, we do not have visibility of sufficient information to assess this, and as such there may be some redundancy in our calculations.

5.8 Insurance recoveries and bad debt provision

We establish the cashflows on a gross basis and then apply the insurance programme to these cashflows.

We make no allowance for the Workers Compensation cashflows in estimating the insurance recoveries, as the insurance programme does not cover these. It provides protection to product and public liability exposures only.

As noted in Section 1.3.1, in relation to James Hardie employees' Workers Compensation claims, we have assumed continuation of these insurance arrangements.

We identify the insurance recoveries with respect to each future settlement year on each treaty (exposure) year and thereby estimate the extent to which amounts are recoverable from each insurer and reinsurer.

We have used the Standard & Poor's credit ratings to identify the credit risk for each of the insurers and reinsurers who underwrote James Hardie's insurance contracts.

We assume that Lloyd's of London and Equitas companies will have 100% recoverability. For the remaining companies, we apply default rates to the cashflow recoveries where the default rates are separately derived by credit rating group and duration to payment.

5.9 Cross-claims recoveries

We have analysed the past rate of cross-claim recoveries being made by the MRCF and James Hardie as a result of issuing cross-claims for contribution.

We have valued these recoveries assuming that they become payable at the time of the claim.

We have estimated that the level of subrogation, factoring in the proportion of claims for which no subrogation is possible and the proportion of claims subrogated when cross-claims are made, is around 1.3% of the gross award.

5.10 Discounting cashflows

Cashflows are discounted at "risk free" discount rates. We have derived these using a yield curve estimated from the prices and yields available on Commonwealth government bonds of varying coupon rates and durations to maturity.

While we have not reviewed the balance sheet of the MRCF in detail, we note that the MRCF does not appear to have sufficient assets to generate the investment income implicit in the discounting of the liabilities.

If such assets are not available then the investment income generated will be insufficient to support the unwinding of the discount on the liabilities. In this case future shortfalls will add to the current shortfall.

It should also be recognised that the yield curves and therefore the discount rates applied can vary considerably between valuations.

5.11 Valuation at 30 June 2004

We have valued the liabilities of open claims and IBNR claims at 18 October 2004, with discount rates effective at 30 June 2004. In order to arrive at a liability at 30 June 2004, it is necessary to add back an amount equal to the cost of the discount and to factor in the payments made between 30 June 2004 and 18 October 2004.

At yields of around 5.5% per annum (being broadly equivalent to the short-term yield) on liabilities of $1.5bn, the income in one quarter of a year would amount to around $20m ($1.5bn x 5.5% x $\frac{3}{12}$).

We understand that the net payments are running at around $5m per month, or $17.5m in the period. As such, the impact of the change in the amount of discounting and the payments made appear to broadly cancel out.

We have therefore made no adjustment to our valuation at 18 October 2004 in arriving at a 30 June 2004 liability estimate.

5.12 Key changes to the methodology since June 2003

We have remodelled the insurance programme based on further understanding of how the programme responds.

In relation to wharfside worker claims, there continues to be a steady flow of claim notifications. We have now modelled the projections of wharf claims consistently with the other disease types.

We have reassessed how to define a settled claim, and also the definition of settlement year for the various claim cost components. This can lead to some changes in the presentation of the data relative to that observed at the last valuation.

As noted above, we have changed our approach to valuing pending claims, from being treated in the same way as IBNR claims to a new method which appropriately takes into account the information we have in relation to these claims.

We have also changed the order of allocation of the diseases recorded on a claim into a particular disease group.

6. ECONOMIC ASSUMPTIONS

6.1 Overview

We are required to make assumptions about the future rate of inflation of claims costs. In doing so, the standard Australian actuarial practice is to separately consider:

- The underlying rate of inflation, usually based on wage/salary (earnings) inflation; and
- The rate of superimposed inflation, i.e. the rate at which claims costs inflation exceeds earnings inflation

It is apparent that the rate of earnings inflation will vary from year to year, and as such a projection of the rate of earnings inflation in each future year is not possible, or more specifically is spurious.

A more common approach taken is to project the long-term rate of earnings inflation and recognise that there may therefore be some fluctuations in one year to the next, but that over a prolonged period the results will be reasonable.

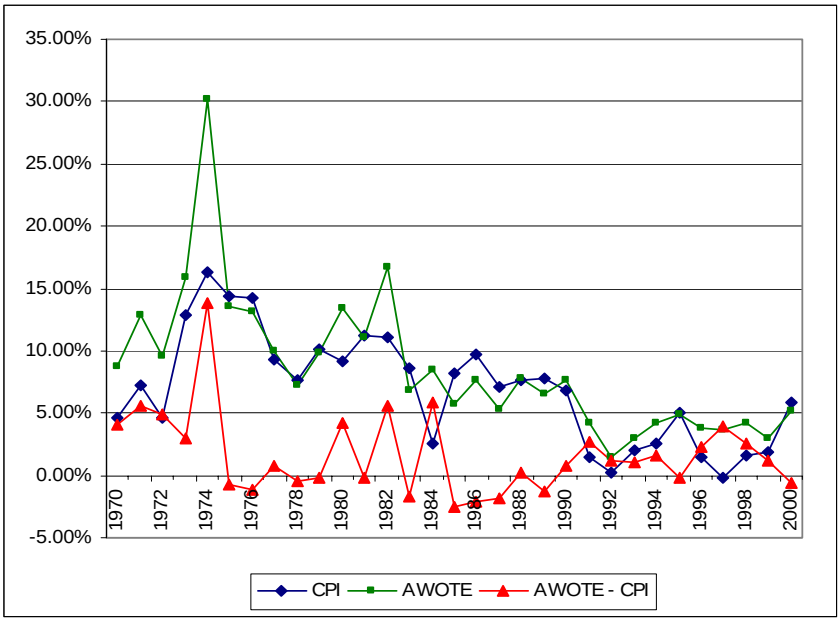
This approach is consistent with standard actuarial practice, and is the approach we have taken in arriving at our long-term assumption for earnings inflation over the next 60 years.

6.2 AWOTE and CPI history

In arriving at our long-term assumption for earnings inflation, we have begun by modelling the gap between Consumer Price Inflation (CPI) and Average Weekly Earnings Inflation (AWOTE) over the last thirty years.

Figure 6.1 shows the trends in both indices and the gap between them.

Figure 6.1: Trends in CPI and AWOTE: 1970 - 2002



Between 1970 and 2000, the annual average rate of CPI was 6.83% and the annual average rate of AWOTE was 8.56%. As such, the gap between the AWOTE and CPI averaged 1.73%.

Based on monthly data, the average annualised rates for various periods were as follows:

Table 6.1: Annualised rates of CPI and AWOTE

	AWOTE	CPI	AWOTE – CPI
1970 - 2000	8.44%	6.74%	1.70%
1980 - 2000	6.26%	5.07%	1.19%
1990 - 2000	3.89%	2.10%	1.79%
1995 - 2000	3.89%	1.66%	2.23%

As such, the average gap over a prolonged period might be thought of as being around 1.7%.

6.3 Commonwealth bonds: zero coupon yields

We have discounted the liabilities at the "risk free rate" in accordance with standard actuarial practice, relevant accounting standards and modern financial economics.

We have adopted the zero coupon yield curve at 30 June 2004, underlying the prices, coupons and durations of certain Australian government bonds for this purpose.

As such, the discount rates we are using are more akin to "risk free rates" of return rather than reflecting the rates that might be achievable on an equity portfolio. The use of risk-free rates of return is consistent with standard actuarial practice, in accordance with Professional Standard PS300 and also with our interpretation of the accounting standards in this regard.

Table 6.2 shows the zero coupon yields adopted for each duration of cashflows.

Table 6.2: Zero coupon yield curve by duration at 30 June 2004

Year	Yield
1	5.36
2	5.42
3	5.79
4	6.09
5	6.23
6	6.28
7	6.31
8	6.34
9+	6.35

The equivalent single uniform discount rate, based on cashflows weighted by term, is 6.12% per annum.

It is important to note that the discount rate can vary, perhaps significantly, between valuations (even quarterly valuations), and can thus cause fluctuations in the perceived liability of the companies. This, however, is purely a consequence of the actuarial and accounting standards and may not alter the underlying cost of the liabilities.

It is also important to understand that if assets are not matched to those assumed, the investment earnings may deviate from the plan implicit within the actuarial valuation. This might generate either excess profit or additional losses.

6.4 Selected economic assumptions

Current economic targets for the long-term are for CPI to rise no faster than 2.5%.

Allowing for the long-term gap of 1.7%, this would imply an average rate of earnings inflation no higher than 4.2% over the long-term.

As such, we have selected our base rate of earnings inflation as being 4% per annum.

We have assumed that the rate of superimposed inflation, being the excess rate of claims inflation over the base rate of inflation, will be 2% per annum. As such, we are assuming that claims costs will increase by 6% per annum over the next 60 years.

Within our overall allowance, and specifically within our superimposed inflation assumption, we have also considered the impact of an ageing profile of claimants, and the effect that may have upon the earnings component of claims costs. We have addressed this further in Section 8.9 and Section 8.10.

We have used the yield curve derived in Section 6.3 and shown in Table 6.2 for the purposes of discounting.

6.5 Consistency of economic assumptions

The most important consideration to bear in mind when setting economic assumptions is the consistency of the various assumptions. For a valuation involving the long-term inflating of cashflows and then discounting these cashflows to current money terms, the key is the relativity between the assumptions.

Whilst future investment yields on risk-free assets will change, so too will the rate of future earnings inflation and consequently also the overall rate of claims inflation. The key factor is that the gap between the two factors remains reasonable.

Within our current valuation, we have allowed for earnings inflation at 4% per annum and average yields at 30 June 2004 of 6.15% per annum. As such, the gap is 2.15% per annum relative to earnings inflation.

We have also allowed for superimposed inflation at 2% per annum, so that the overall gap between claims inflation and the yield is 0.07% per annum

(being 1.04 x 1.02 – 1 – 6.15%). In other words, we are effectively discounting future cashflows in today's money terms by 0.07% per annum.

7. ANALYSIS OF CLAIMS EXPERIENCE – CLAIM NUMBERS

7.1 Overview

We have begun by analysing the pattern of notifications of claims as shown in Table 7.1. It shows the claim notifications by year since 1991/92.

Table 7.1: Number of claims reported annually

Report Year	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Workers Compensation
1991/92	25	11	5	7	4	29
1992/93	41	19	10	9	2	34
1993/94	56	38	15	25	5	67
1994/95	82	13	8	15	5	30
1995/96	71	25	14	23	3	33
1996/97	82	36	14	21	1	39
1997/98	105	30	20	19	2	51
1998/99	95	25	12	14	3	31
1999/00	91	42	16	12	14	38
2000/01	126	44	29	20	26	39
2001/02	154	90	23	32	16	59
2002/03	175	94	33	42	14	52
2003/04	180	97	27	29	9	36
2004/05*	132	68	8	20	3	37
2004/05**	231	118	14	37	6	70

* To 18 October 2004, i.e. 6.5 months of the financial year

** Full Year estimate

7.2 Mesothelioma claims

It can be seen that for mesothelioma, the incidence of notifications has shown a step change upwards since 2000 and a gradual increase between the 2002/03 financial year and the 2003/04 financial year.

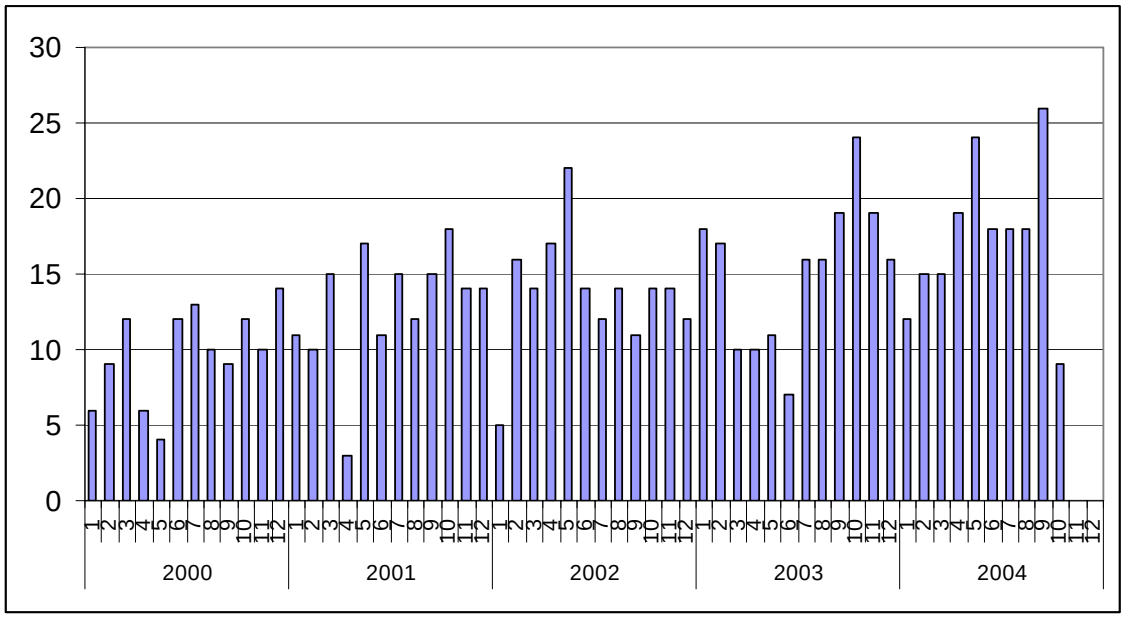
At 180 claims for 2003/4, the number of claims was broadly in line with our expectations of 177 claims within our 30 June 2003 assessment.

However, it is also apparent from the claims information that since that time, there has been an upward step in claim numbers, far beyond anything previously seen, with 132 claims reported in just 6.5 months.

Monthly analysis of notifications

We have examined claims on a monthly basis by disease type to understand the nature of the trends.

Figure 7.1: Monthly notifications of mesothelioma claims: 2000-2004



* October 2004 figure is as at 18 October 2004

There have been 132 mesothelioma claims to date in the year from April 2004 to mid-October, and the monthly average appears to be about 18 at present, based on analyses of rolling 3, 6 and 9-month averages.

It should be noted that there have been 2 outlier months in 2004/05: May had 24 claims (6 above the current implied average of 18) and September had 26 claims (8 above the current implied average of 18).

If the current trend continues, there would be some 231 [132+5.5x18] claims in the financial year to 31 March 2005, significantly above the 185 claims we expected.

One might make the observation that May was 2 months after the start of the Inquiry and September 2 months after the end of the Inquiry, and both events

would have been associated with considerable "air-time" dealing with asbestos and James Hardie's name, thereby increasing awareness, and possibly also speeding up notifications of claims that were ultimately going to come through to James Hardie. We have not seen such a significant increase in claims notifications within the insurance market.

Claims notifications by State

We have monitored the claims notifications patterns by State in which the claim is filed. Table 7.2 shows the number of claims notified by year by State.

Table 7.2: Number of mesothelioma claims by State of claim filing

Report Year	NSW	NZ	Other	QLD	USA	VIC	WA	Total
1994	59		3	2		18		82
1995	49		1	3		16	2	71
1996	53		6	2		12	9	82
1997	78		4	3		16	4	105
1998	61		2	2		26	4	95
1999	57		4		1	21	8	91
2000	70	3	4		7	28	14	126
2001	102		2	1	2	27	20	154
2002	109		2	1		40	23	175
2003	108					46	26	180
2004*	61		1			51	19	132
Total	**807**	**3**	**29**	**14**	**10**	**301**	**129**	**1,293**

* To 18 October 2004

It can be seen that the most significant States, in relation to where claims are filed, are NSW (63%), Victoria (23%) and WA (10%). At just 4%, the remaining States make up little of the overall quantum.

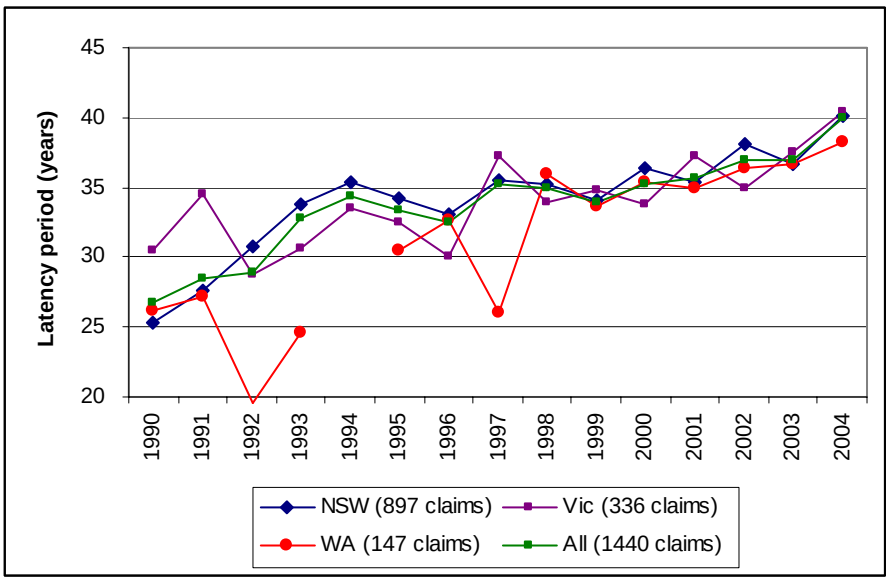
It is noticeable that for the 2003 year, NSW made up 60%, Victoria made up 26% and WA made up 14%.

For the current year, the trend has changed somewhat with NSW making up 46%, Victoria making up 39% and WA making up 14%.

NSW appears to have remained stable in absolute terms whilst Victoria has increased considerably, and this may be a consequence of reduced forum shopping into NSW and targeted lawyer activity in Victoria. WA has also shown some more moderate increases.

In order to consider further the extent to which the change in the pattern of notifications, especially in Victoria is merely a speeding up of claims that were going to ultimately be advised to the MRCF, or the extent to which these are purely incremental claims we have tracked the latency period of the claims reported in the last ten years for the three significant states by number – being NSW, Victoria and WA. The latency period is defined as the lag between the average date of the first period of exposure and the date of notification of a claim.

Figure 7.2: Latency of mesothelioma claims by State from average first exposure to date of notification



It might be thought that acceleration of claims would be associated with shortening latency periods. Figure 7.2 does not appear to indicate this to be the case. As such, it might therefore be that these new additional claims, far in excess of previous levels, are a function of the MRCF being increasingly joined in the aggregate pool of all mesothelioma claims.

The mean latency from average date of first exposure might be thought to overstate the true latency slightly as the average date of first exposure will

pre-date the mean date of exposure, recognising that many individuals have several periods of exposure. As such, whilst the average latency now appears to be nearer forty years than thirty-five years, this should not be unexpected given:

- The definition of exposure date used for this analysis.
- The ageing profile of claimants and there being reducing continuing exposures.

In setting a base valuation assumption, we need to consider whether the observations in 2004/05 are aberrations or are part of a new trend. The traditional approach is to consider how much faith can be placed in the latest emerging experience. We have the option of:

- Ignoring the latest experience and dismissing it as simply a one-off fluctuation, reverting to the previous assumptions for notification years 2005 and onwards.
- Recognising it in part, and give some credibility to the emerging experience, but with a gradual reversion to the previous expectations.
- Recognising it in full, and asserting this to be part of a new trend which will continue in relation to all future years of claims.

It is our view, that the base number should be strengthened to reflect the experience to date. Clearly there is uncertainty about the extent to which this trend will continue in future years. It is our view that we should recognise this change in numbers of claims in full and assume it is part of a new trend. As a consequence, we have assumed a base number of claims for 2005/06 of 236.

Our reasoning for this is outlined below.

It might be thought that the increased awareness amongst consumers (potential future claimants) of the James Hardie association with asbestos would lead to some increased co-joining which would not have been predicted in our previous assessment.

The fact that other clients have not seen an upsurge to date might appear to support this, but it might also be that they are one stage removed from James Hardie in the reporting of claims, so that any surge they experience will not yet have occurred (e.g. if they are an insurer).

It is not clear at this early stage whether there has been or will be increased repudiation of such claims or associated lower average costs in these additional claims.

Of the 132 claims since 1 April 2004 for mesothelioma, 15 have so far resulted in death and 38 claims have so far been settled for around $200,000

on average (below our long-term average expectation of $250,000, based on around $300,000 for non-nil claims and 82.5% of claims being settled for a non-nil amount).

We have not recognised these features to date, as the claims data is not yet mature enough for the latest year of claim notifications to support a revision to the claims average costs in light of this.

7.3 Asbestosis claims

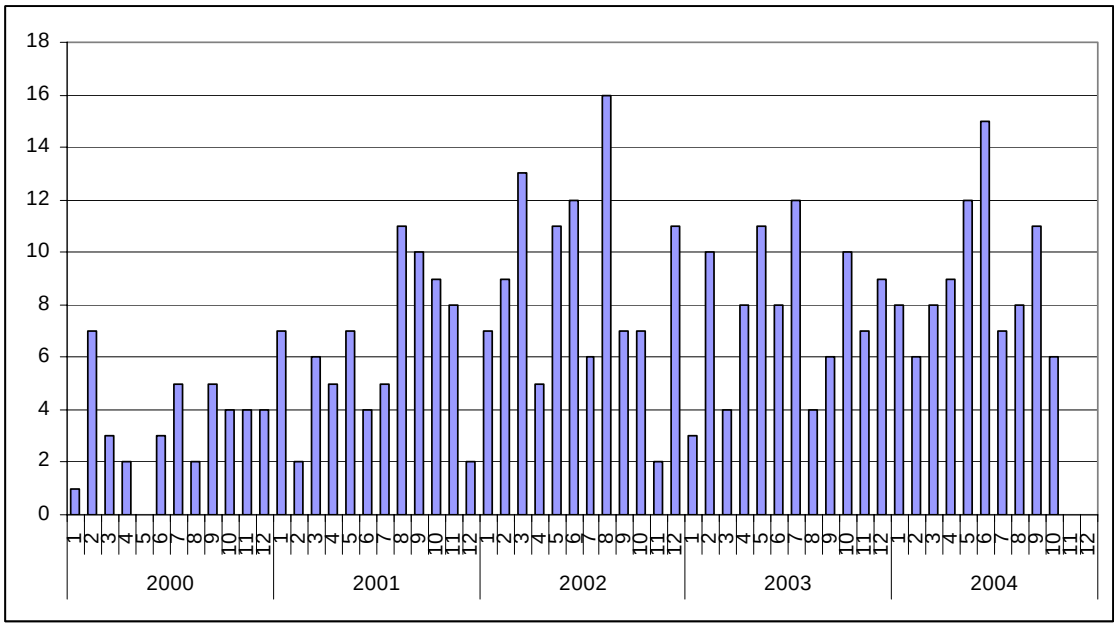
It can be seen that for asbestosis, the incidence of notifications has shown a step change upwards since the end of 2000 and a gradual increase thereafter.

At 97 claims, the number of claims was higher than our expectations of 90 claims underlying our 30 June 2003 valuation assessment.

However, as for mesothelioma, it is also apparent from the claims information that since that time, there has been upward step in claim numbers with 68 claims reported in 6.5 months.

We have examined claims on a monthly basis by disease type and by State in which the claim is being filed, to understand the nature of the trends.

Figure 7.3: Monthly notifications of asbestosis claims: 2000-2004



* October 2004 figure is as at 18 October 2004

There have been 68 claims to date and the monthly average appears to be about 9 at present, based on analyses of rolling 3-, 6- and 9-month averages.

Again, it has been observed that the claims being filed in Victoria have shown a considerable increase in numbers, although NSW also appears to have increased, albeit not at the same rate as Victoria.

Table 7.3: Number of asbestosis claims by State of claim filing

Report Year	NSW	Other	QLD	SA	USA	VIC	WA	Grand Total
1994	11	-	-	-	-	2	-	13
1995	20	1	-	1	-	3	-	25
1996	27	-	-	-	-	8	1	36
1997	26	-	-	-	-	4	-	30
1998	21	1	-	-	-	3	-	25
1999	29	-	-	-	1	12	-	42
2000	34	1	-	-	2	7	-	44
2001	74	-	-	1	-	15	-	90
2002	81	1	1	2	-	9	-	94
2003	72	-	2	-	-	20	3	97
2004*	46	2	1	-	-	16	3	68
Grand Total	480	8	4	4	3	123	10	632

* To 18 October 2004

As such, we now expect there to be some 118 [68+9x5.5] claims in the full financial year to 31 March 2005, significantly above the 88 claims we expected.

As with mesothelioma, we need to decide whether this is part of a new trend or simply an aberration.

As with mesothelioma, we have formed the view that we should recognise this experience. Accordingly, we have assumed that the number of claims for the 2005/06-year will be 120.

7.4 Lung cancer and ARPD & Other claims

For lung cancer claims, the notifications have been steady and do not appear to have shown the same pattern of notification as mesothelioma and asbestosis. Indeed, the experience in 2004/05 has been favourable (14 annualised) relative to the previous year (27).

The running monthly average is for about 1 claim per month, and with the 8 notifications to date in the year, we currently expect the 2004/05-year to have 14 notifications. Nonetheless we feel that this sharp reduction in notifications ought not be totally reflected at this stage, as the 2004/05-year might be slightly anomalous.

We have therefore assumed a base of 21 claims for 2005/06.

In relation to ARPD & other claims, the number of claims fell from 42 in 2002/03 to 29 in 2003/04. However, 2004/05 currently appears to be around 37 claims for the year, based on 20 claims notified to date and a running average of 3 claims per month.

We have also assumed that there will be 38 claims notified in 2005/06.

7.5 Workers Compensation and Wharf claims

The number of Workers Compensation claims has remained relatively stable over the past few years, at around 50 to 60 per year. However, in 2003/04, the numbers fell to 36 and in 2004/05 to date they have increased to 37 in the year to date.

The monthly average is currently 6 claims per month and we expect 70 in 2004/05.

Prospectively, we have assumed 51 claims for 2005/06, noting the volatility in the most recent two years.

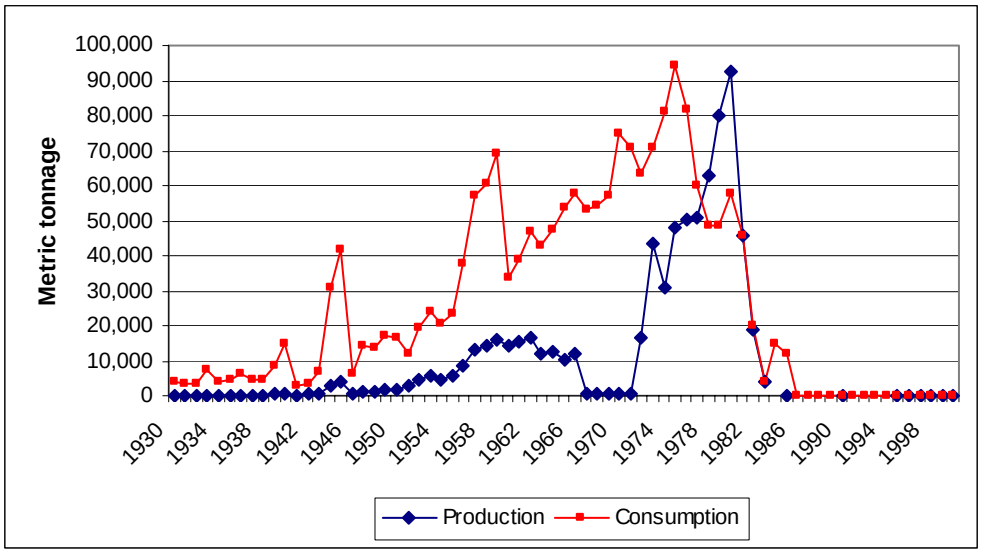
The financial impact of this source of claim is not substantial given the proportion of claims which are settled for nil, which results from the insurance arrangements.

For wharf claims, we have assumed 9 claims will be notified in 2005/06. Again, the financial impact of this source of claim is not material.

7.6 Exposure – peak year of claims and pattern of notifications

Figure 7.4 shows the impact of the use of asbestos in Australia in the period 1930 to 1987. It can be seen that the exposure, being measured in net consumption, appeared to peak in the early to mid 1970s.

Figure 7.4: Consumption and production indices – Australia 1930-1987



Source: R Virta, USGS Website Annual Yearbook

At a simple level, a peak of consumption in 1975 might appear to correspond to a peak in notifications of mesothelioma claims in around 2010, being 35 years later (and equal to the mean of the latency period from the average date of exposure of the claimant to notification).

Taking into account this curve and the distribution of the latency periods, the actual assumption it gives is for a peak of mesothelioma claims in 2010/2011 (which is supported by that previous simple assessment).

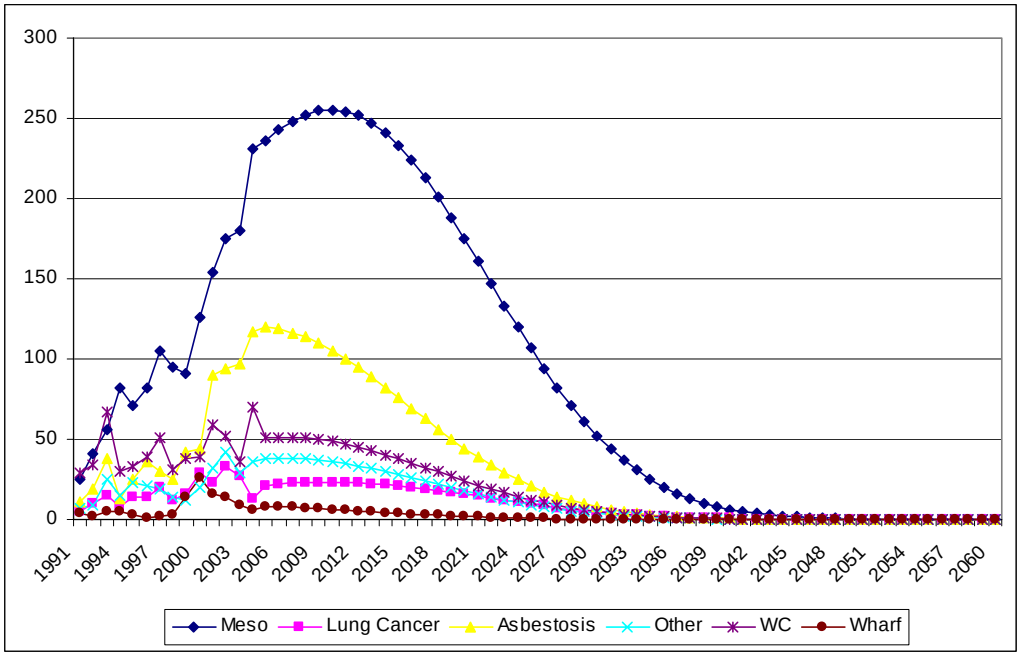
We have assumed that the peak year of notification for each disease type is as follows:

Table 7.4: Peak year of notifications

	Current peak assumption	Previous peak assumption
Mesothelioma	2011	2011
Lung Cancer	2011	2011
Asbestosis	2005	2003
ARPD & Other	2007	2007
Workers Compensation	2007	2007
Wharf claims	2001	N/A

We have projected the future notifications from the curve we have derived from the exposure curve. Figure 7.5 shows the pattern of future notifications which we have estimated from our exposure curve and an estimate of the level of future notifications in the 2005/06-year.

Figure 7.5: Expected future notifications of claims by disease type.



For mesothelioma, we have strengthened the whole of the curve at all future years recognising the recent trend. Whilst there is uncertainty about the period over which this new trend will continue, i.e.:

- Whether it is an aberration,
- Whether it is a short-term change, or
- Whether it is a long-term change.

We have adopted the view that it is appropriate to assume that the rate of increase in the 2004/05 year is an aberration, relating to the move to a new scale of joining of the MRCF in claims, but that the level of claims (in volume terms) is not.

Similarly, with asbestosis, our understanding is that new methods of diagnosis are in part responsible for a shift towards diagnosis of asbestosis. We have assumed that this new level of notifications will continue but that the rate of increase in asbestosis claims will not. That is to say, the rate of change between 2003 and 2004 is an aberration but that the level of claims (in volume terms) is not.

The number of future notifications and ultimate number of claims is shown, both at last time's valuation and at this valuation.

Table 7.5: Number of notifications –future claims and all years

	Current number projection		Previous number projection	
	2004 onwards	Total	2003 onwards	Total
Mesothelioma	5,207	6,558	4,374	5,545
Lung Cancer	466	701	540	748
Asbestosis	1,761	2,373	1,229	1,770
ARPD	632	936	834	1,122
Workers Compensation	875	1,760	926	1,777
Wharf claims	97	205	65	173
All claim types	**9,039**	**12,534**	**7,968**	**11,094**

It can be seen that the recognition of these new levels of claims as part of an ongoing trend of joining of the MRCF in claims has strengthened our projected ultimate number of claims by 1,440 claims, the majority of which results from mesothelioma and asbestosis.

As we have stated earlier, there is uncertainty in the extent to which this trend will continue but it is our view that we should assume this to be the case.

8. ANALYSIS OF EXPERIENCE – AVERAGE CLAIMS COSTS

8.1 Overview

We have modelled the average claim awards and plaintiff legal costs (where separately disclosed) by disease type in arriving at our valuation assumptions.

Average attritional (being claims below $1m in current money terms) claim awards will vary considerably with the development of new heads of damage (e.g. Sullivan vs. Gordon (1999)), and with other legal changes in the basis of awards being granted.

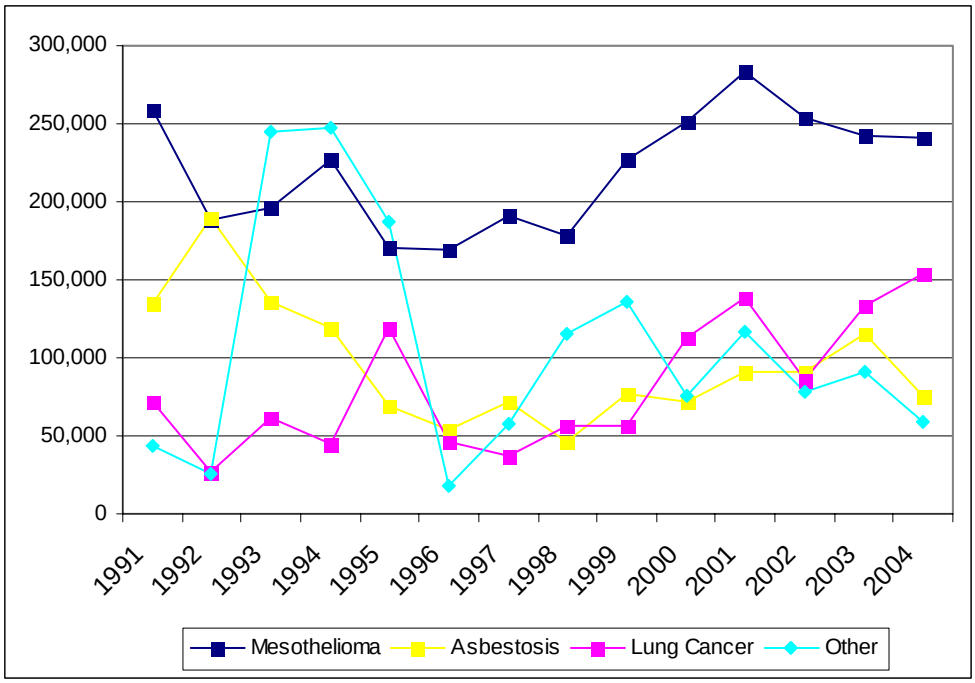
Table 8.1 shows how the average settlement costs for non-nil attritional claims have varied by plaintiff settlement year. All data are in AU$ and have been converted into current money terms using earnings inflation at 4% per annum.

Table 8.1: Attritional average claim award (current money terms)

Plaintiff settlement Year	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Workers Compensation
1991	259,574	134,194	72,431	43,639	0	89,498
1992	188,394	189,314	26,578	25,573	0	195,097
1993	196,434	135,614	60,941	244,648	146,248	103,235
1994	226,604	119,061	44,262	247,205	49,341	112,597
1995	170,834	69,595	118,907	187,126	9,252	68,176
1996	168,815	53,525	46,575	18,258	0	63,368
1997	190,589	72,140	37,170	58,281	65,797	116,695
1998	177,987	46,315	56,901	114,830	0	69,125
1999	226,521	76,817	56,224	135,545	66,561	111,482
2000	251,663	71,444	112,688	75,289	96,513	95,538
2001	283,731	90,703	138,496	117,273	56,259	47,807
2002	253,302	91,274	85,815	78,373	170,893	100,228
2003	242,777	114,782	132,781	90,877	100,946	158,080
2004	240,666	75,745	154,407	59,374	89,583	190,000

Figure 8.1 represents these results pictorially.

Figure 8.1: Average claim costs for liability claims (current money terms)



8.2 Mesothelioma claims

For mesothelioma, the year 2001 resulted in the highest annual average cost. The step changes in 1999 and 2001 reflect in part legislative changes that occurred and also in the percentage of the total award which the MRCF were required to contribute.

We have modelled the percentage share James Hardie and the MRCF have taken of the gross settlements (for those claims where such information is held). Table 8.2 shows that share, for those claims where such information is available, and how it has changed over time.

Table 8.2: Contribution percentage for mesothelioma claims: 1994-2004

Plaintiff Settlement Year	Settlement	Contribution by James Hardie	Percentage Share
1994	15,980,153	8,419,705	52.7%
1995	15,878,697	7,561,598	47.6%
1996	12,624,169	6,794,157	53.8%
1997	15,052,716	9,912,416	65.9%
1998	17,594,661	8,721,268	49.6%
1999	19,946,030	14,543,405	72.9%
2000	32,714,458	22,157,638	67.7%
2001	41,457,151	27,157,341	65.5%
2002	50,241,785	36,609,655	72.9%
2003	52,074,917	34,782,469	66.8%
2004	26,759,333	19,561,285	73.1%
Total	**300,324,069**	**196,220,936**	**65.3%**

The step change in the average costs from the levels exhibited between 1995 and 1998 and those exhibited after 1998 may be in part a result of the change in the percentage shares contributed by James Hardie and the MRCF as well as the introduction of new heads of damage.

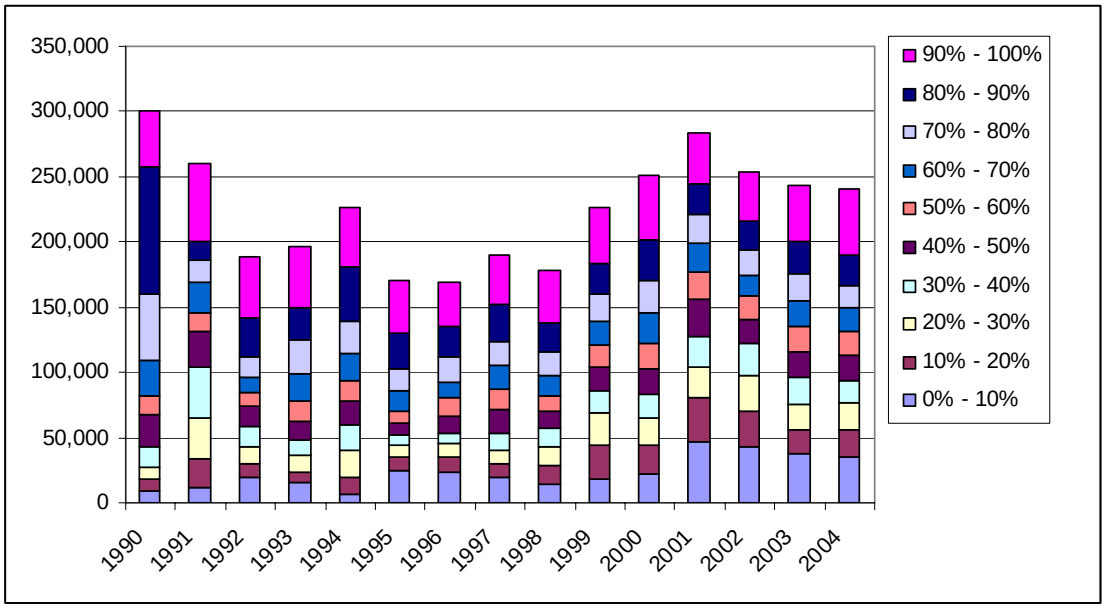
We have also tracked the contribution of the average costs for mesothelioma claims by banding claims together in cohorts of 10% groups. That is, identifying the contribution to the average cost from the lowest 10% of non-nil claims by size, of the 10% to 20% cohort of claims by size etc.

The aim of this is two-fold:

- To understand the trends in the average costs, and
- To identify if the change in mix of claims by size has led to an apparent negative rate of superimposed inflation since 2001.

Figure 8.2 shows the relative contribution of the various band to the overall average costs identified in Table 8.1.

Figure 8.2: Contribution of individual bands of claims to overall average attritional mesothelioma claim costs (current money terms)

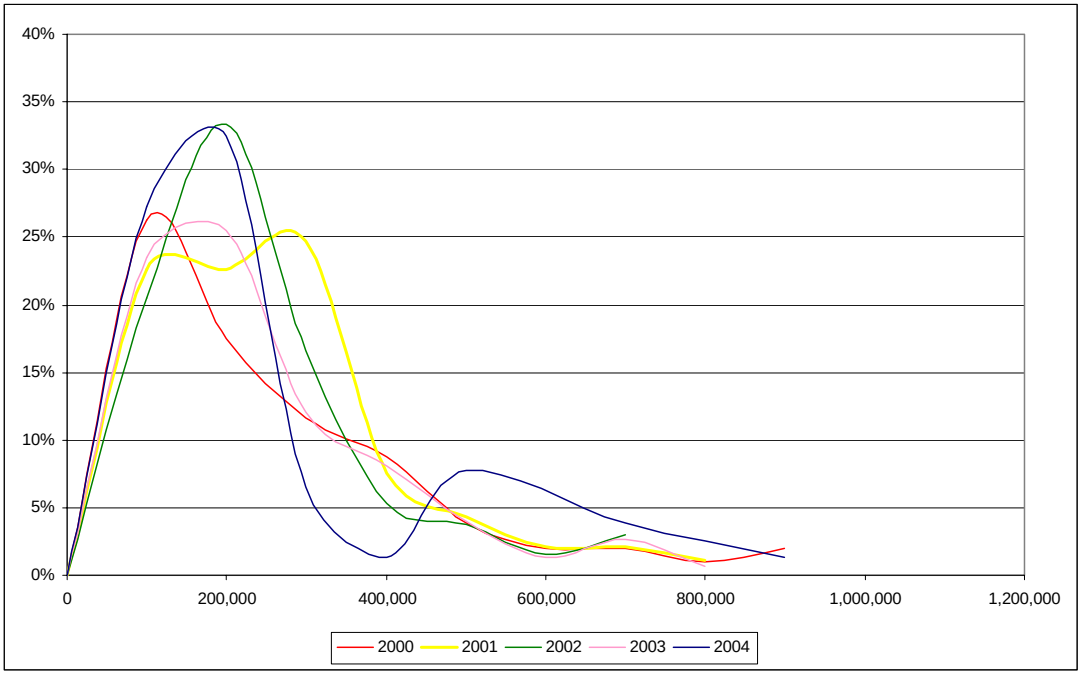


This chart shows that the key drivers to the pattern in inflated average claims costs are in fact the “smaller sized” claims.

It can be seen in Figure 8.2 that the lowest 20% of claims in 2001 contribute $80,000 to the overall average of $284,000. By comparison, for 2003 the comparative figures are $56,000 and $243,000.

As a consequence of these smaller-sized claims being higher than the surrounding settlement years, the overall distribution of claims for 2001 is more “skewed to the right” than other years. That is to say, that the distribution of award sizes is more heavily weighted to larger sizes for 2001 relative to other years. This can be seen in an alternative representation of this data showing the distribution of claims by size.

Figure 8.3: Distribution of claims awards for attritional mesothelioma claims: 2000 - 2004 (current money terms)



The 2001 settlement year appears to be more skewed to larger claims than most years surrounding it. Whilst 2004 appears to have a heavier tail above $500,000, it is considerably shallower in the mid-range of claims and this has the effect of reducing the averages for 2004 relative to 2001.

In setting our assumption for mesothelioma, we have considered average awards over the last 3, 4 and 5 years in arriving at our valuation assumption.

The average of the three years to 2003 is $257,000; the average of the last four years to 2003 is $256,000 and the average of the last five years to 2003 is $252,000. If we remove 2001 from our analysis, recognising it as somewhat of an outlier relative to the other years, the average of the last four years is average $246,000.

In these circumstances we have adopted $250,000 for the attritional average award.

8.3 Asbestosis claims

For asbestosis, it can be seen from Table 8.1 that in 2003 the average settlement was anomalously high at almost $115,000.

We have again considered the averages of the last 3, 4 and 5 years.

The average of the last three years is $102,000; the average of the last four years is $98,000 and the average of the last five years is $95,000. These are not surprising given the high average cost in 2003.

We have selected $100,000 as our valuation assumption as being broadly in the middle of these three assumptions.

8.4 Lung cancer claims

Lung cancer claims appear to have shown a considerable increase in the last five years relative to prior periods, and appear to have been reasonably consistent since that time.

We have selected an assumption of $110,000 but note that if the emerging experience of three of the last four years continues we will have to increase this assumption at some point in the future. However, in overall terms the financial significance of this is not overly material, being that the liability for lung cancer claims accounts for less than 4% of the overall liability.

8.5 ARPD & Other claims

For ARPD & other claims, the average of the last three years is $92,000; the average of the last four years is $89,000 and the average of the last five years is $96,000. Accordingly, we have selected $92,500 as our valuation assumption.

8.6 Workers compensation and wharf claims

We have selected $100,000 as our assumptions for Workers Compensation and wharf claims, noting the variability in these which is not unsurprising given the small volume of claims and the high nil settlement rate.

The materiality of these classes also needs to be borne in mind. The liability for Workers Compensation is less than 2% of the overall liability and wharf claims account for less than 1% of the overall liability.

8.7 Large claim size and incidence rates

To date, there have been 13 settled claims with claims awards in excess of $1m in current money terms. All of these claims are product and public liability claims and the disease diagnosed in every case is mesothelioma.

In aggregate they have been settled for less than $20m in current money terms, at an average cost of approximately $1.5m. We have noted one claim exceeding $3.5m in current money terms.

The incidence rate of large claims to non-nil settlements has been variable, dependent on the random incidence of large claims by settlement year.

Over the period 1990-2004 there have been 13 large claims compared with 1005 non-nil non-large claims settlements. This gives an incidence rate of 1.3%.

Since 1999, there have been 10 large claims compared to 616 non-nil non-large settlements, or an incidence rate of about 1.6%.

We have assumed that there will be an incidence rate of 2% prospectively over all future years, although it should be recognised that the incidence of such claims is random and fluctuations in this incidence rate can occur from year to year.

We have taken the average costs from all years as our base assumption, given the small volume of such claims. This has been assumed to be $1.5m for the award and plaintiff legal costs with separate allowance also made for defendant legal costs.

As a consequence, the overall loading per non-nil mesothelioma claim to make allowance for large claims is $30,000 (being 2% x $1,500,000). This cost loading is applied to all non-nil settlements, resulting in an average cost for non-nil mesothelioma claims of $280,000.

We have made no allowance for any other large claims in relation to any other disease type as no disease types have had claims settled for in excess of $550,000 in actual money terms.

Table 8.3: List of large claims reported and settled

Report Year	Settlement Year	Total cost (claim award, plaintiff and defendant legal costs)
1990	1990	744,491
1996	1997	2,159,731
1996	1996	1,214,704
1999	1999	3,096,710
2000	2001	1,188,776
2001	2001	1,730,243
2001	2001	1,190,277
2001	2002	1,649,128
2002	2002	1,156,487
2002	2002	1,200,693
2002	2002	1,132,362
2002	2002	1,111,236
2003	2004	1,061,321

It should also be noted that there remain five claims open with award sizes estimated at costing in excess of $800,000. In particular, there remain 3 claims which are in excess of $1m and of which one has an expected costs in excess of $2m.

Our approach for reserving for these claims has been to take case estimates and apply a loading to the legal costs components.

8.8 Average defendant legal cost for non-nil and nil claim settlements

As with the average awards, we have modelled the defendant legal costs separately. We have also modelled “nil” claims and non-nil claims separately as they should portray different characteristics in relation to their legal costs.

We have again removed large claims from the analysis and treated them separately, applying a large claim loading and an incidence rate consistent with the underlying large claims.

We have used closure year as the base definition to allocate costs into years and given the lag between the award settlement and the closure year, distortions can arise from year to year depending on closure activity by the MRCF of claims files.

8.8.1 Non-nil claims

For mesothelioma, we have determined an average of $35,000 recognising that 2001 would have been influenced by the high average costs in that year.

For asbestosis, there are significant periods where there were no defendant legal costs settled in the year. We have determined an average of $30,000 per non-nil claim recognising the high averages that otherwise proliferate in the non-zero years.

For lung cancer, we have selected $12,500 although there is sparse data from which to project this. We recognise that there have been substantial averages in 1993 and 1996 but we are aware that these have been a result of precedent – setting cases, or matters involving key principles of law. It should also be recognised that the financial materiality of such an assumption is not expected to be significant given the low number of lung cancer claims and the relatively high nil settlement rate.

For ARPD & Other claims, we have selected $35,000 based on an average of the last three years.

For wharf claims we have selected $25,000 and for Workers Compensation we have selected $20,000.

8.8.2 Nil claims

For mesothelioma, we have selected an average of $22,500 recognising that 2002 has been influenced by a significant case which resulted in no liability falling upon the MRCF.

For asbestosis, we have selected an average of $3,500 per nil claim recognising the low costs prevalent within this disease type for nil claims.

For lung cancer, again there is a scarcity of data, but we have selected $7,500 as our assumption, based on the three observations that there have been in the period 1994-2003. We note that there a small number of precedent-setting cases for which significant legal costs have been incurred but where the claim has not been closed.

For ARPD & Other claims, we have selected $15,000 based on an examination of the average of the last three four and five years.

For wharf claims we have selected $7,500 and for workers compensation we have selected $1,500.

8.9 Superimposed inflation

At our previous valuation, we indicated that an allowance of 2% per annum for superimposed inflation was appropriate. We identified a number of factors to consider in setting this assumption. In our view, none of these have changed considerably to alter our view of the rate of future superimposed inflation.

Whilst the future rate of superimposed inflation is uncertain, and not predictable from one year to the next, we have maintained an allowance of 2% per annum as a long-term trend over all future years.

Again, it is comforting that the average claim costs appear to have been stable in the last few years, although the emergence of new or expanding heads of damage does not tend to proceed smoothly but rather is more "lumpy".

We have reviewed the rate of inflation of claims costs by settlement year for the last 13 years for mesothelioma claims.

Table 8.4 shows the rate of inflation from one year to the next, and also the rate of inflation annually from the year of settlement to the present day.

Table 8.4: Rate of inflation of attritional mesothelioma awards

Plaintiff Settlement Year	Average Award	Rate of Inflation	Annual Inflation from settlement year to 2004
1991	155,893		
1992	117,670	-25%	6%
1993	127,600	8%	6%
1994	153,086	20%	5%
1995	120,025	-22%	8%
1996	123,351	3%	9%
1997	144,832	17%	8%
1998	140,666	-3%	9%
1999	186,184	32%	5%
2000	215,123	16%	3%
2001	252,236	17%	-2%
2002	234,192	-7%	1%
2003	233,439	0%	3%
2004	240,666	3%	

These figures should not match the figures in Table 8.1 owing to the inflation of the awards in that table.

Table 8.4 shows the rate of increase of awards from year to year and also the annualised rate of inflation to 2004. For example, the average award in 1999 showed a 32% increase over the average award in 1998. Furthermore, the rate of increase annually from 1999 to 2004 has been 5% per annum for five years.

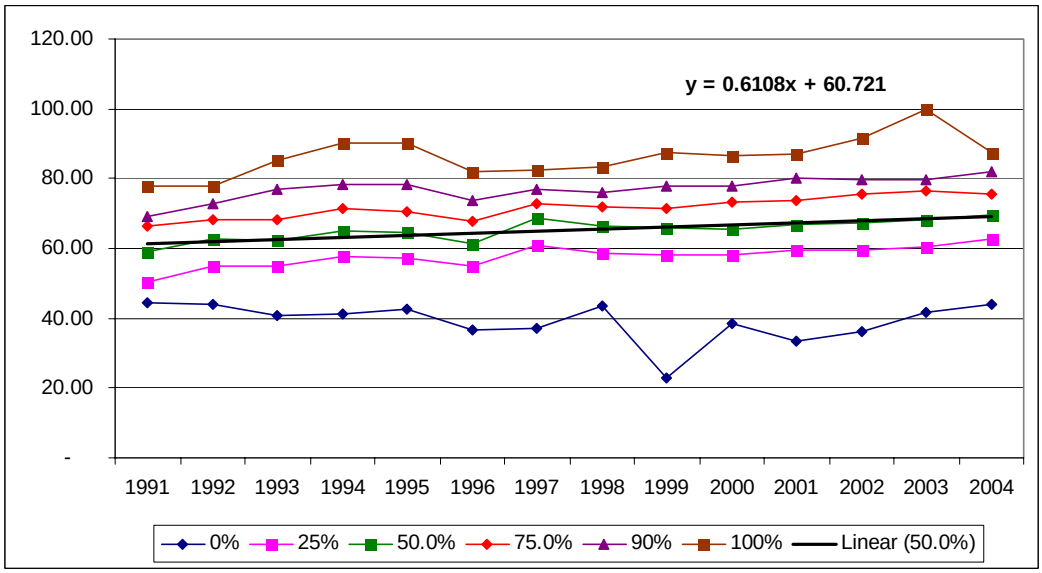
Although the last three years have shown fairly stable average award size, we are still of the opinion that going forward allowance for superimposed inflation needs to be made given the random incidence of legal developments and the emergence of new heads of damage.

As can be seen the average rate of inflation can be extremely volatile from year to year, as low as -25% and as high as +32%. The annual rate of inflation for most settlement years to the present day does appear to be in the range 4% to 6% generally. This should be compared with the assumption of base inflation of 4% per annum and superimposed inflation of 2% per annum.

8.10 Ageing of claimants

We have again analysed the age of the claimants and understood how they are trending over time. This is important in consideration of the extent of superimposed inflation in claims costs as a result of the age of claimants. Young claimants will be associated with higher awards, owing to the earnings replacement component. Furthermore, greater awards for loss of expectation of life would be expected.

Figure 8.4: Age of claimants: 1991/92 to 2004/05 by report year



The chart above indicates that claimants continue to age (on average) by more than 0.61 years per year, increasing from 59 years in 1991 to almost 70 years by 2004. This has the effect of negating some aspects of superimposed inflation. This is because part of the awards relate to economic loss and loss of expectation of life and awards for these are in part a function of age.

It is comforting to note that, at this time, the age profile of claimants is fairly stable. There is nothing within the data so far to indicate a considerable level of third-wave claims, which would be associated with younger individuals and higher average costs.

9. ANALYSIS OF CLAIMS EXPERIENCE - NIL SETTLEMENT RATES

9.1 Nil settlement rate

We have modelled the nil settlement rates, being the number of nil settlements expressed as a percentage of the total number of settlements. It should be noted that the nil settlement rate in these tables have (generally) increased since the last valuation; this being especially so for the older settlement years. Some ratios have reduced.

Over time, it might be expected that the ratios on recent settlement years might also further mature upwards, although this is by no means certain.

Table 9.1: Nil settlement rates by class and disease type

Plaintiff Settlement Year	Mesothelioma	Asbestosis	Lung Cancer	ARPD & Other	Wharf	Workers Compensation
1991/92	15%	50%	50%	20%	100%	89%
1992/93	34%	13%	-	33%	100%	80%
1993/94	20%	33%	33%	33%	67%	76%
1994/95	19%	16%	57%	50%	63%	53%
1995/96	19%	9%	50%	31%	33%	81%
1996/97	27%	33%	25%	58%	100%	71%
1997/98	42%	32%	32%	55%	-	84%
1998/99	33%	55%	44%	36%	100%	88%
1999/00	19%	26%	30%	25%	17%	76%
2000/01	13%	14%	35%	20%	50%	87%
2001/02	26%	19%	44%	25%	23%	86%
2002/03	16%	5%	48%	21%	64%	80%
2003/04	14%	9%	40%	15%	54%	96%

9.2 Mesothelioma claims

The nil settlement rates for mesothelioma have shown some degree of volatility between settlement years.

The 1997/98 observation of a nil rate of 42% is the highest year in this respect.

During the last six years, the rate has varied between 13% and 33%. There is no visible trend in the rate of nil settlements in the past experience.

We have considered the average of the last 3, 4 and 5 years separately when considering the assumption to use.

The last three years have averaged 18%, the last four years have averaged 17% and the last five years have also averaged 17%.

In these circumstances we have assumed a future nil settlement rate of 17.5%. This is unchanged from the previous assessment and also reflects in part the immaturity of the nil settlement rate in recent claim years.

We do note our earlier comments about the increases in number of claims in which the MRCF are being joined in Victoria. This might have the potential to increase the rate of nil settlements, or reduce average costs but we have not seen sufficient evidence of this yet and would not postulate this within our central estimate at this time.

9.3 Asbestosis claims

At the previous valuation, all non-mesothelioma claims were grouped together and an average rate of 25% was selected. At this valuation, we have more information enabling us to analyse the nil settlement rate for these diseases separately.

As with mesothelioma, the asbestosis nil settlement rates have been fairly volatile. They have also shown a similar pattern to mesothelioma in the last six years.

We have reviewed the averages rate over the last 3, 4 and 5 years in determining our assumption.

The last three years have averaged 10%, the last four years have averaged 10% and the last five years have averaged 13%.

In these circumstances we have assumed a nil settlement rate of 10%.

9.4 Lung cancer claims

The average of the last three years for lung cancer claims has been 44%, the last four years have averaged 43% and the last five years have averaged

41%. In these circumstances we have selected 40% as the future nil settlement rate.

This rate could be affected in the future by legal changes to the division and acceptability of claims in relation to claimants who have also smoked and the contribution of smoking to the incidence of lung cancer.

9.5 ARPD & Other claims

The average for the last three years for ARPD & Other claims has been 20%, the average for the last four years has been 20% and the average for the last five years has been 21%.

Accordingly, we have selected 20% as our nil settlement rate assumption for this class of disease.

9.6 Workers Compensation claims

The nil settlement rates for workers compensation are extremely high, and are reflective of the increasing portion of claims which emanate from post-1955 exposure and are therefore fully insured.

The average nil settlement rate of the last three years is 92%, the average of the last four years is 91% and the average of the last five years is 89%.

We have selected a rate of 85% and this compares with a previous assumption of 82.5%.

9.7 Wharf claims

For wharf claims, the average of the last three years is 38%, the average of the last four years is 40% and the average of the last five years is 38%. Accordingly we have selected 40%. We did not provide an assumption at the last valuation, instead incorporating the assumption implicitly within the average cost. This time we have approached our valuation of wharf claims in exactly the same way as the other categories of claim.

10. INSURANCE PROGRAMME

10.1 Overview

Until 1985, James Hardie had in place General and Products liability insurance covers with a $1m primary policy layer. These were “each and every loss” contracts which were placed amongst a number of insurance providers on a claims-occurring basis.

In addition, James Hardie maintained further “umbrella” insurance contracts, with varying retentions and policy limits. These contracts had the form of an “each and every loss” and “in the aggregate” clause, so that they were similar to aggregate excess of loss contracts. That is, they paid all costs arising from claims with exposure in a specified year from the retention up to the relevant policy limit. All claim costs in relation to a given year in excess of the limit would be retained by James Hardie (or, now, the MRCF).

The umbrella policies were placed on two bases:

- For the period up to and including 1985 they were on a claims-occurring basis;
- For the period 1986-1997 they were on a claims-made basis, underwritten by CE Heath C&G, who are now part of the HIH Group of companies in liquidation, who then reinsured some of the layers.

We have not considered within this report the nature of the Workers Compensation insurance programmes. We have assumed they will respond accordingly and as such we neither consider the gross liabilities of those contracts or the credit risk from such contracts.

We have based our understanding of the insurance programme on public disclosures made within the Special Commission of Inquiry. Of relevance is the disclosure of information within the James Hardie submission to the Commission in relation to Term of reference 1. This document includes some detailed analysis of the insurance programme structure, and the scope of insurance protection available. This information is publicly available.

We have also considered the Report by David Jackson QC which provides further discussion on the evidence of Mr Ian Hutchison in relation to the Insurance programme.

We also refer to information contained within my previous report outlining the level of insurance recoveries that might be made.

10.2 Expected recoveries

Table 10.1 shows the insurance recoveries and the bad debt allowances that we have made within our valuation assessment.

Table 10.1: Insurance recoveries

	Undiscounted ($m)	Discounted ($m)
Gross Liability	4,055.1	1,732.6
QBE Recovery	(31.0)	(23.7)
Other Insurance	(498.8)	(196.3)
Net Liability before Bad Debt	3,525.3	1,512.6
Bad Debt	60.3	23.4
Net Liability after Bad Debt	3,585.6	1,536.0

As such, the insurance recoveries (after allowing for bad debt) are 11.4% of the gross costs.

We have made allowance for bad debts within our valuation by use of the default rates in Appendix A. These have been sourced from Standard & Poors' Rating Performance Book, March 2004 and are based on bond default rates.

The overall bad debt allowance amounts to $23.4m of the present value of the projected insurance recoveries of $196.3m, or around 12% of the expected insurance recoveries.

In the absence of any bad debt charge, the liabilities would have been $23.4m lower.

11. VALUATION RESULTS

11.1 Central estimate recommendation

At 30 June 2004, our central estimate of the liabilities of the MRCF is $1,536.0m (2003: $1,573.4m). This figure is discounted and is net of insurance recoveries.

A detailed summary of these results is shown in Appendix B and the assumptions underlying this are summarised in Appendix C.

We have estimated the insurance recoveries to be $469.5m undiscounted (2003: $336.6m, excl QBE) and $196.6m discounted (2003: $160.8m, excl QBE).

All of these figures make allowance for the QBE commutation and also net off any impact of bad debt on some of the insurance recoveries as a result of the insolvencies or potential credit risk of some of the insurers.

Table 11.1 shows the effects of inflation and discounting between the current and the previous assessments.

Table 11.1: Comparison of net costs: June 2003 to June 2004

	June 2003 $m	June 2004 $m
Total projected cashflows in current dollars	1,412.8	1,615.6
Future inflation allowance	1,990.3	1,970.0
Total projected cash-flows with inflation allowance	**3,403.1**	**3,585.6**
Discounting allowance	(1,829.6)	(2,049.6)
Net present value liabilities	**1,573.4**	**1,536.0**

We note the net present value liabilities comprise a gross amount before insurance of $1,732.6 million (2003: $1,734.2 million) and an insurance value of $196.6 million (2003: $160.8 million). The insured Workers Compensation liabilities are not included in either the gross or net figures.

In the absence of any changes to assumptions from our 30 June 2003 valuation, other than the discount rate, we would have projected a central estimate liability assessment of $1,440.4m as at 30 June 2004.

Consequently, our revised assessment in this report represents an underlying increase in the liabilities of $95.6m.

This is reflected in the total projected cash-flows in the above table (inflated, pre discount) that have increased by $183m (from $3,403m to $3,586m) or 5% since the last valuation at 30 June 2003. This is in addition to the actual payments in the interim period that have been approximately $60m.

The increases in the underlying cash-flows and the liabilities are principally a consequence of:

- An increase in the projected future numbers of claims which we have adopted based on the recent emerging experience (see further discussion below); and
- A lower assumed average cost per claim based on recent trends which partly off sets the increased numbers of claims (see further discussion below).

11.2 Roll forward valuation from June 2003 assessment

One method actuaries often use in identifying change is to first consider what they would have expected at this valuation, given the previous valuation basis estimates, assuming there has been no change in experience and that actual experience is tracking that which had previously been forecast.

At the previous assessment, our central estimate was $1,573.4m. Factoring in the payments that have been expected to be made, and the amount of the discount that should be unwound (i.e. the interest charge), the reserve that would have been expected, assuming no change to the yield curve would have been as follows:

Table 11.2: Roll forward valuation from June 2003 valuation to June 2004

	$m
Central estimate at 30 June 2003	1,573.4
less payments expected to be made	(64.1)
plus cost of discount unwind	69.2
Adjustments to insurance recoveries	(1.8)
Expected central estimate at 30 June 2004	1,576.7
Adjustment to roll forward for change in yield curve	(136.3)
Expected central estimate at 30 June 2004 adjusted for yield curve change	1,440.4

As can be seen from Table 11.2 above, we would have expected the discounted value of the reserve to increase this year by $5.1m (i.e. $69.2m - $64.1m), in the absence of yield curve changes.

11.3 Actual vs. expected analysis

Using the roll forward technique identified above, it is possible to identify the causes of the change to the liabilities by each disease type, and also causes of change.

The actual reserve at 30 June 2004 is $1,536.0m and this compares to an expected reserve of $1,576.7m.

It is clear from Table 11.1 that the projected cashflows have increased. This is a result of the strengthening in the valuation basis for numbers of claims offset by reductions in average costs to some extent. However, there has been a consequent offset resulting from the increase in discount rates as a result of the change in the yield curve.

In the absence of the change in the discount rate, the provision would have strengthened by $95.6m [= $1,536.0m - $1,440.4m]. The impact of the changing discount rate is to reduce the liability by $40.7m relative to our expectations.

The sources of the $95.6m change are identified in Table 11.3 below.

Table 11.3: Analysis of change: June 2003 to June 2004

	Change in Liability $m	Liability at June 2004 $m
Expected liability from June 2003 valuation		**1,576.7**
Change in discount rate		(136.3)
Expected liability adjusted for current discount rate		**1,440.4**
Impact of Change in:		
- Peak Year of claims	16.0	
- Claim numbers	295.7	
- Nil settlement rate	20.8	
- Emerging experience relative to IBNR claims for 2004/05 year	(28.9)	
- Claims average costs	(110.8)	
- Legal average costs	(55.7)	
- Settlement delay pattern	(8.5)	
- Insurance contracts effect	(32.7)	
- Bad debt on insurance recoveries	23.4	
- QBE contract not previously included within actuarial valuation	(23.7)	
Total development in liability at 30 June 2004	**95.6**	**95.6**
Liability at 30 June 2004		**1,536.0**

11.4 Superimposed inflation and legal costs

We have again identified the elements of legal costs and superimposed inflation within our valuation. This is important for the purposes of consideration of the potential savings that might be achievable under a modified common law system.

Table 11.4: Breakdown of costs components of reserve

	Liability at June 2003	Liability at June 2004
Claim costs (excl. all legal costs and superimposed inflation)	$906m	$896m
Total legal costs (plaintiff and defendant costs)	$432m	$410m
Superimposed inflation: claims costs	$235m	$230m
Total Liability	**$1,573m**	**$1,536m**

Based on the above figures, legal costs (including superimposed inflation on legal costs) amount to $410m, and this is 26.7% [= 410/1,536] of the total costs of the liabilities, or 36.4% [= 410/1,126] of the claimant award (before any further disbursements by claimants to their solicitors).

Superimposed inflation contributes $230m to claim costs.

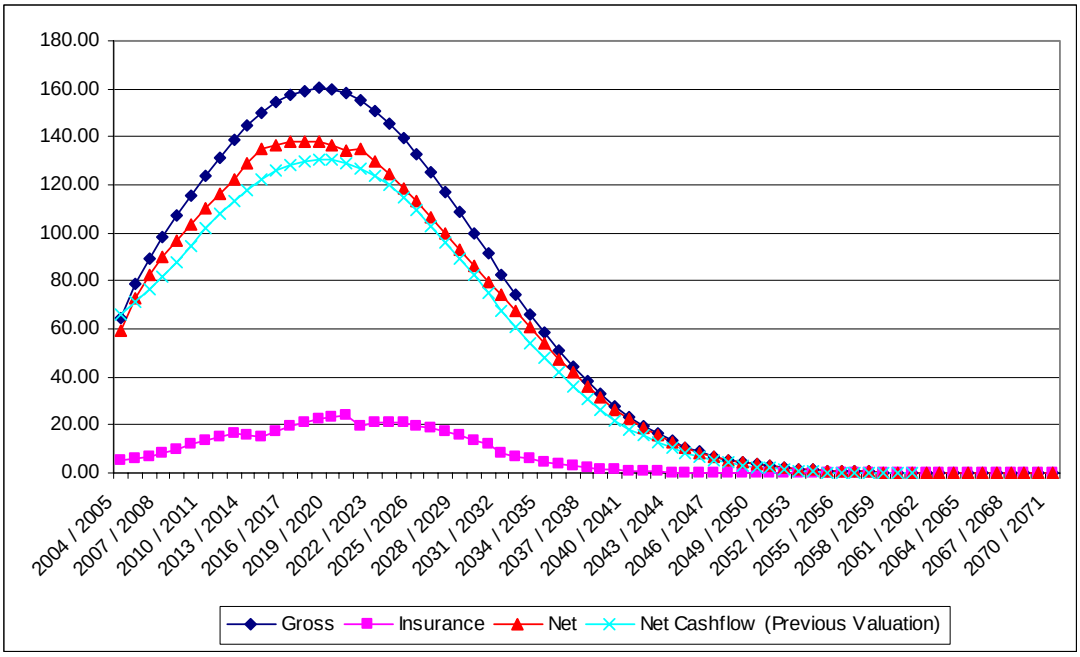
In aggregate, legal costs and superimposed inflation make up 42% [= 640/1,536] of the total costs.

11.5 Cashflow projections

Figure 11.1 shows a comparison of the net cashflows (at a central estimate) for our current valuation and the expected cashflows from our previous assessment.

It is not surprising, given the strengthening in numbers of claims projected, that the future cashflows now appear higher than that previously forecast, although this has in part been mitigated by the lower average costs assumed.

Figure 11.1: Cashflow Projections – June 2004 ($m)



12. UNCERTAINTY

12.1 Overview

There is uncertainty for any valuation of the liabilities of an insurance company or a self-insurer. The sources of such uncertainty include:

- Parameter error – this is the risk that the parameters and assumptions chosen ultimately prove not to be reflective of future experience
- Model error – this is the risk that the model selected for the valuation of the liabilities ultimately prove not to be adequate for the projection of the liabilities
- Legal developments – this is the risk that the legal environment in which claims are settled changes relative to its current position thereby causing significantly different awards
- Inflation
- Economic environment
- Potential sources of exposure – this is the risk that there exist sources of exposure which are as yet unknown or unquantifiable, or for which no liabilities have yet been observed, but which may trigger future claims.

In the case of asbestos liabilities, these uncertainties are exacerbated by the extremely long latency period from exposure to onset of disease and notification of a claim, meaning that the claims are subject to considerably more legal and medical developments and the impact of a changing environment. [Asbestos-related claims often take in excess of 40 years from exposure, compared with 4-5 years for most CTP or WC claims.]

12.2 Sensitivity testing

As we have noted above, there are many sources of uncertainty. Actuaries often perform "sensitivity testing" to identify the impact of different assumptions as to future experience, thereby providing an indication of the degree of parameter error risk to which the valuation assessment is exposed.

Sensitivity testing may be considered as being a mechanism for testing "what will the liabilities be if instead of choosing [x] for assumption [a] you choose [y]?" It is also a mechanism for identifying how the result will change if experience turns out different in a particular way relative to that which underlies the central estimate expectations. As such, it provides an indication of the level of variability inherent in the valuation.

We have performed some sensitivity tests of the results of our central estimate valuation. We have sensitivity tested the following factors:

- ***nil settlement rate***: 2.5 percentage points and 5 percentage points above and below
- ***average claim cost of a non-nil claim***: 5% and 10% above and below
- ***peak year of claims***: increase/decrease by 1 through to 5 years
- ***number of claims notified***: measure changes relative to the central estimate of 5% above and below
- ***superimposed inflation***: 2% superimposed inflation for 5 years reducing to –2% after a further five years; and 6% superimposed inflation for the next five years, linearly reducing to 2% after a further five years.
- ***discount rates***: 1 and 2 percentage points above and below
- ***base inflation***: 1 and 2 percentage points above and below

The factors we have chosen are consistent with those we sensitivity tested at our previous valuation.

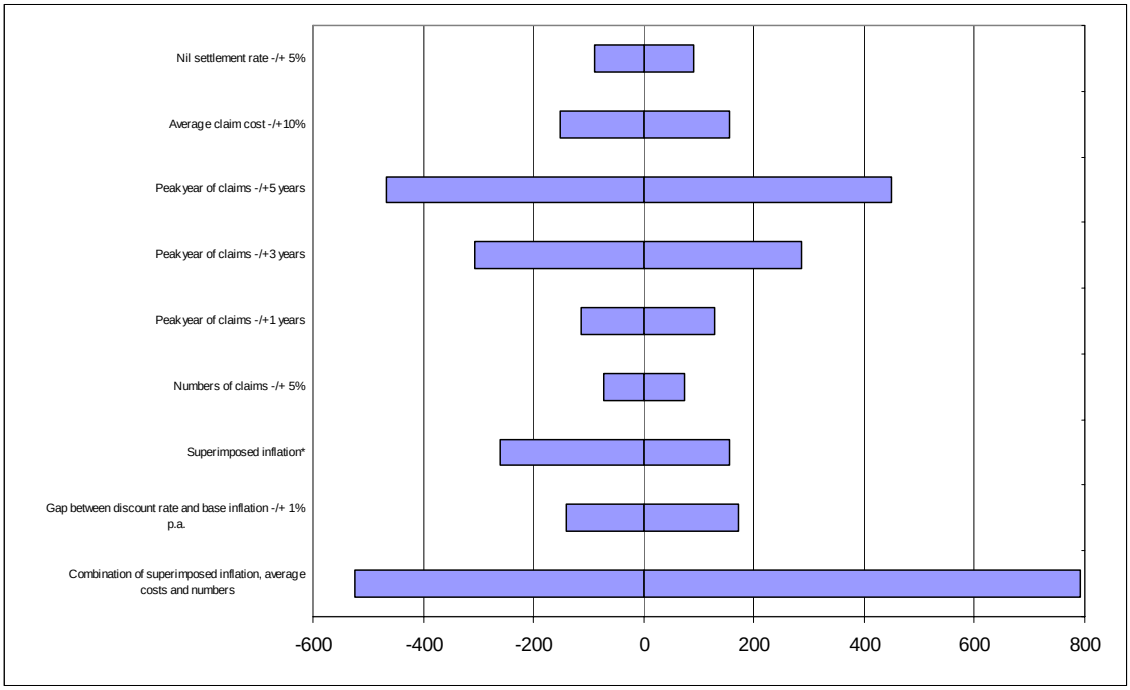
12.3 Results of sensitivity testing

Figure 12.1 shows the impact of various individual sensitivity tests on the central estimate of the liabilities, and of a combined sensitivity test of a number of factors.

It should be noted that because we have tested multiple scenarios of each assumption, one could not gauge an overall potential range by adding these adjustments together.

It should also be noted that because of the interactions between assumptions, the maximum range may not be the sum of the constituent parts. Rather it is important to recognise that it is unlikely that all assumptions would deteriorate together, and there are often compensating upsides to the downsides that can arise. This is especially so when considering the inter-dependencies and correlations between parameters, such as higher inflation often being associated with higher discount rates: the former would increase the liabilities whilst the latter would decrease the liabilities. As such, in the figure below, we have considered the relationship between base inflation and the discount rate as the key sensitivity test rather than each assumption independently.

Figure 12.1: Sensitivity testing results – Adjustments around the central estimate (in $m) at June 2004



* The superimposed inflation sensitivity tests are for 6% per annum for 5 years reducing to 2% per annum; and 2% per annum for 5 years reducing to –2% per annum

Whilst our combined sensitivity test of a number of factors (including superimposed inflation, average claim costs and numbers of claims) indicates a range around the central estimate of liabilities of -$500m to +$800m (equivalent to a range of liabilities of $1.0bn to $2.3bn), the actual cost of liabilities could fall outside that range depending on the out-turn of the actual experience.

Our sensitivity testing has regard only to matters potentially impacting the liability assessment. It does not consider, or take into account, the manner in which the liabilities may be funded by the MRCF or James Hardie. The extent to which the assets held do not match the liabilities (for example, non-income earning assets, currency risk or duration mismatch) could introduce further uncertainty as to the eventual cost of meeting the liabilities. As noted in Section 1.6, consideration of such risks is outside the scope of this report and is a matter for the MRCF and James Hardie.

APPENDICES

A. Credit rating default rates by duration

Rating	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10	Yr. 11	Yr. 12	Yr. 13	Yr. 14	Yr. 15
AAA	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.3%	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.6%	0.7%
AA+	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
AA	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.3%	0.5%	0.6%	0.8%	0.9%	1.0%	1.2%	1.3%	1.4%
AA-	0.0%	0.1%	0.2%	0.4%	0.6%	0.7%	1.0%	1.1%	1.2%	1.3%	1.5%	1.7%	1.7%	1.8%	2.0%
A+	0.1%	0.1%	0.3%	0.5%	0.6%	0.8%	1.0%	1.2%	1.5%	1.8%	2.1%	2.4%	2.7%	2.9%	3.2%
A	0.1%	0.1%	0.2%	0.3%	0.5%	0.7%	0.9%	1.2%	1.4%	1.8%	2.2%	2.4%	2.6%	2.7%	3.0%
A-	0.0%	0.2%	0.4%	0.6%	0.9%	1.2%	1.6%	1.8%	2.2%	2.4%	2.5%	2.7%	2.8%	3.0%	3.2%
BBB+	0.3%	0.9%	1.6%	2.2%	2.8%	3.5%	4.0%	4.4%	4.9%	5.4%	5.8%	6.1%	6.7%	7.5%	8.4%
BBB	0.3%	0.7%	1.1%	1.7%	2.4%	3.0%	3.7%	4.5%	5.1%	5.9%	6.8%	7.3%	7.9%	8.2%	8.8%
BBB-	0.5%	1.5%	2.6%	4.1%	5.5%	6.9%	7.9%	8.7%	9.4%	10.2%	10.9%	11.8%	12.3%	13.1%	13.8%
BB+	0.6%	2.1%	4.3%	6.1%	7.6%	9.2%	10.8%	11.5%	12.7%	13.7%	14.4%	14.9%	15.2%	15.6%	16.5%
BB	1.2%	3.4%	6.2%	8.6%	11.0%	13.4%	15.1%	16.6%	18.1%	19.1%	20.3%	21.1%	21.5%	21.6%	21.6%
BB-	2.0%	5.7%	9.6%	13.2%	16.3%	19.1%	21.3%	23.4%	25.3%	26.7%	28.0%	28.8%	30.0%	30.7%	31.5%
B+	3.2%	8.9%	14.2%	18.8%	22.0%	24.4%	26.7%	28.6%	30.1%	31.6%	32.9%	34.1%	35.2%	36.4%	37.5%
B	9.0%	17.9%	24.3%	28.4%	31.5%	34.1%	35.5%	36.7%	37.7%	38.6%	39.5%	40.7%	41.9%	42.8%	44.0%
B-	13.0%	23.6%	31.5%	36.2%	39.2%	41.6%	43.8%	45.4%	45.9%	46.5%	46.9%	47.1%	47.4%	47.6%	47.9%
CCC+	30.9%	39.8%	45.5%	49.5%	53.0%	53.4%	55.5%	56.1%	57.6%	58.4%	59.3%	60.1%	60.8%	61.6%	61.6%
L	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NR	5.3%	10.5%	15.1%	18.7%	21.6%	24.0%	25.9%	27.5%	28.9%	30.0%	31.1%	32.1%	33.0%	33.7%	34.5%
R	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Standard and Poors Ratings Performance Book, March 2004

B. Summary results ($m)

DISCOUNTED VALUE OF CASHFLOWS ($m)

Years	Mesothelioma	Lung Cancer	Asbestosis	ARPD & Other	Defendant Legal Costs	General Liability Cost	Insurance	Net General Liability	Workers Compensation	Defendant Legal Costs	Workers Compensation Costs	Wharf Claims	By Claim Recoveries	Net Liabilities
1-5	263.4	10.4	48.1	14.6	36.7	373.2	30.7	342.6	3.7	1.4	5.1	4.0	4.3	347.4
6-10	299.6	8.7	47.9	13.6	49.0	418.7	46.9	371.9	3.8	1.8	5.7	2.5	4.7	375.4
21-15	271.6	8.0	38.1	11.4	41.5	370.5	44.9	325.6	3.2	1.5	4.7	1.7	4.2	327.8
16-20	202.4	6.3	25.0	8.0	28.6	270.3	38.7	231.7	2.3	1.0	3.3	0.9	3.1	232.8
21+	221.1	8.2	22.3	8.0	28.1	287.6	35.5	252.2	2.3	0.9	3.2	0.7	3.3	252.7
All	**1,258.1**	**41.5**	**181.3**	**55.5**	**184.0**	**1,720.4**	**196.6**	**1,523.9**	**15.3**	**6.6**	**21.9**	**9.8**	**19.5**	**1,536.0**

UNDISCOUNTED CASHFLOWS ($m)

Years	Mesothelioma	Lung Cancer	Asbestosis	ARPD & Other	Defendant Legal Costs	General Liability Cost	Insurance	Net General Liability	Workers Compensation	Defendant Legal Costs	Workers Compensation Costs	Wharf Claims	By Claim Recoveries	Net Liabilities
1-5	305.2	11.8	55.5	16.7	42.8	432.0	35.7	396.3	4.3	1.6	5.9	4.6	5.0	401.8
6-10	464.0	13.4	73.9	21.0	75.8	648.2	72.7	575.5	5.9	2.9	8.8	3.9	7.3	580.8
11-15	569.4	16.7	79.5	23.8	86.9	776.3	95.0	681.3	6.7	3.1	9.9	3.5	8.8	685.8
16-20	574.4	18.0	70.6	22.5	81.1	766.6	109.5	657.1	6.4	2.8	9.2	2.6	8.7	660.2
21+	1,087.7	42.3	106.4	39.1	135.8	1,411.3	156.5	1,254.7	11.1	4.3	15.4	3.0	16.2	1,256.9
All	**3,000.6**	**102.3**	**385.9**	**123.1**	**422.4**	**4,034.4**	**469.5**	**3,564.9**	**34.5**	**14.6**	**49.1**	**17.6**	**45.9**	**3,585.6**

Note: Plaintiff legal costs are included within the claim cost figures for the various disease types.

C. Actuarial valuation assumptions

C.1 Ultimate number of claims notifications

Mesothelioma	6,558
Lung Cancer	701
Asbestosis	2,373
ARPD & Other	936
Wharf claims	205
Workers Compensation	1,760

C.2 Projected average claim award costs of non-nil settlements (including plaintiff legal costs where such costs are not separated from the award)

Mesothelioma	$250,000
Lung Cancer	$110,000
Asbestosis	$100,000
ARPD & Other	$ 92,500
Wharf claims	$100,000
Workers Compensation	$100,000

C.3 Large claims loading (for claims in excess of $1m)

Mesothelioma	$1,500,000 and incidence rate of 2.0% = $30,000 per claim
Lung Cancer	$0
Asbestosis	$0
ARPD & Other	$0
Wharf claims	$0
Workers Compensation	$0

C.4 Nil claim settlement rate

Mesothelioma	17.5%
Lung Cancer	40.0%
Asbestosis	10.0%
ARPD & Other	20.0%
Wharf claims	40.0%
Workers Compensation	85.0%

C.5 Economic assumptions

Base Inflation	4% per annum
Superimposed inflation	2% per annum
Ageing of portfolio	0.61 years annually
Discount rate	Assessed by reference to current yield curve on Government Bonds at valuation date