

General BI Subjects

The Adjustments Clause (Trends, Variations & Other Circumstances)

Introduction

Several policy items include a very important clause in their definitions called the Adjustments Clause, which gives huge flexibility in the calculation of a claim. These items are the ones that insure loss of Gross Profit (or Insured Profit), Dual Wages, Rents, and Revenue; i.e. the items in which the calculation of loss is based on a reduction in income (turnover, rents or revenue).

This Module explains the Adjustments Clause in the context of a Gross Profit Item because that is the most important item in the majority of BI policies. Dual Wages, Rents and Revenue are specialist items that will be dealt with in later modules.

The Adjustments Clause in a Gross Profit Item

A conventional or classic Gross Profit Item is as follows:

“Item 1: Gross Profit

The insurance under this Item is limited to the loss of Gross Profit due to (a) reduction in turnover and (b) increase in cost of working and the amount payable as indemnity under this Item shall be:”

The most important and unfortunately the most complex aspect is the claim in respect of loss of sales (“reduction in turnover”). A typical policy specification is:

“..... and the amount payable as indemnity under this Item shall be:

(a) in respect of reduction in Turnover, the sum produced by applying the Rate of Gross Profit to the amount by which the Turnover during the Indemnity Period, in consequence of the Damage, falls short of the Standard Turnover.”

“Turnover” is defined in the policy and it simply means sales. I use these terms interchangeably.

Reduction in Turnover

The reduction in turnover is the difference between actual sales and those that would have been achieved **but for the damage**. I refer you to Module 3 in “Introduction to BI” where the reduction in turnover and its place in the calculation of claim under Clause (a), of the Gross Profit Item, shown above, are explained. I now want to describe in more

detail, how to apply the flexibility of the Adjustments Clause equitably to produce an assessment of claim that is a fair indemnity for the interruption loss.

We will look first at the calculation of lost sales, which is *“the amount by which the Turnover during the Indemnity Period, in consequence of the Damage, falls short of the Standard Turnover”*.

The actual maintained turnover during the Indemnity Period is self evident from the financial records of the insured business. But the most critical element in most claims is, “What turnover would have been achieved but for the Damage?”

The classic policy details how this should be calculated using the term “**Standard Turnover**” – *“the amount by which the Turnover during the Indemnity Period, in consequence of the Damage, falls short of the **Standard Turnover**”*.

It is defined with reference to a pre-Damage period as follows:

“ ‘Standard Turnover’ means the Turnover during the period in the twelve months immediately before the date of damage which corresponds with the Indemnity Period.”

A comparison between this **historical** Standard Turnover and the actual turnover achieved during the Indemnity Period is almost never a reasonable measure of the loss of turnover resulting from the damage. It is for this reason that the definition of Standard Turnover quoted above is incomplete without the additional words of the Adjustments Clause, which are bracketed to it:

“ ‘Standard Turnover’ means the Turnover during the period in the twelve months immediately before the date of damage which corresponds with the Indemnity Period

*to which such adjustments shall be made as may be necessary to provide for the trend of the Business and for variations in or other circumstances affecting the Business either before or after the Damage or which would have affected the Business had the Damage not occurred, so that the figures thus adjusted shall represent as nearly as may be reasonably practicable **the results which but for the Damage would have been obtained** during the relative period after the Damage.”*

And so the loss of sales is measured, not against what was achieved last year (the **historical** Standard Turnover) but against the sales that would have been achieved but for the Damage, during the relevant period after the Damage. The relative or relevant period is the Indemnity Period and so the turnover that would have been achieved but for the Damage is the **adjusted** Standard Turnover.

The Adjustments Clause provides for trends, variations and other circumstances to be factored into estimating what changes would have taken place between the sales that were achieved last year and the sales that would have been achieved this year, but for the insured Damage.

In the vast majority of claims the only adjustments made are for the trends of the business. In my opinion “trend” analysis is used to justify arbitrary adjustments to the historical Standard Turnover. I suspect this is because they are simple to calculate and can be applied mechanically.

But do they produce a fair result?

Trend Analysis & Trend Adjustments

To illustrate a typical trend analysis, consider the following year-on-year comparison of sales achieved over the 24 months before a fire, conveniently occurring on 1 January 2005. I have grouped them in quarterly subtotals because individual months are quite vulnerable to random fluctuations and while this might also be said about quarters, at least they are less subject to short-term distortions.

	2003	2004	%Δ
Jan - Mar	468,000	519,480	11%
Apr - Jun	512,000	563,200	10%
Jul - Sep	518,000	580,160	12%
Oct - Dec	629,000	698,190	11%
Jan - Jun	980,000	1,082,680	10%
Jul - Dec	<u>1,147,000</u>	<u>1,278,350</u>	11%
Annual	2,127,000	2,361,030	11%

This is a trend. i.e. long term consistent growth at a fairly steady rate.

In the absence of other factors we might confidently assume that, but for the fire on 1 January 2005, the business would have continued to achieve a growth in sales of about 11%.

But what projections could be made with confidence from the following 2 examples of “trends”?

	2003	2004	%Δ
Jan - Mar	468,000	477,360	2%
Apr - Jun	512,000	547,840	7%
Jul - Sep	518,000	590,520	14%
Oct - Dec	629,000	735,930	17%
Jan - Jun	980,000	1,025,200	5%
Jul - Dec	<u>1,147,000</u>	<u>1,326,450</u>	16%
Annual	2,127,000	2,351,650	11%

	2003	2004	%Δ
Jan - Mar	468,000	552,240	18%
Apr - Jun	512,000	593,920	16%
Jul - Sep	518,000	559,440	8%
Oct - Dec	629,000	647,870	3%
Jan - Jun	980,000	1,146,160	17%
Jul - Dec	<u>1,147,000</u>	<u>1,207,310</u>	5%
Annual	2,127,000	2,353,470	11%

The year-on-year comparison shows an increase of 11% in both cases but neither reflects a steady pattern of growth and a projection of sales at +11% into 2005 is almost

certainly invalid. These are not 11% trends despite the comparison of total 2004 with total 2003.

I am reluctant to place much faith in the credibility of a single quarter's growth and so, although it might be said that the immediate pre-fire result is the most persuasive indicator of expected sales post fire (i.e. the Oct to Dec quarter at +17% in the left hand example and +3% in the right hand example), I would be inclined to make an adjustment based on the 6 months pre-fire of +16% in the left hand case and +5% in the right hand case.

This is, however, subject to an adequate explanation of what was happening to the business because the rate of growth in the left hand example was accelerating and in the right hand case it was declining. Perhaps, but for the fire, the former would have accelerated further to, say, 19% or 20% and perhaps the latter would have declined further to zero or even minus 5%.

The worst attitude to these pre-loss sales patterns would be to advocate for an 11% adjustment in the first case and a 3% adjustment in the second; choosing the most negative possible "trend" without bothering to find out what business dynamics generated the numbers.

Of course we recognise that claims will probably be submitted with the most optimistic "trend" adjustment (+17% on the left and +11% for the right hand case) but it is superficial in the extreme to advocate the opposite and then negotiate to a mid-point without finding out what factors were driving the sales patterns.

Before looking at a couple of examples let me comment briefly on seasonality as it affects the assessment of lost sales.

The reason why we use the same months of the previous year as the base period for our assessment (i.e. the historical Standard Turnover) is that they are identical from the seasonal point of view.

If it were not for seasons we could, for example, suggest that sales quarter by quarter in 2004, from our first example, had increased from \$519,480 to 698,190, which is a compound growth rate quarter to following quarter of about 10%. We might conclude that the January to March 2005 quarter would achieve sales of 10% greater than the previous October to December quarter of \$698,190.

This is the table from our first example, again.

	2003	2004	%Δ
Jan - Mar	468,000	519,480	11%
Apr - Jun	512,000	563,200	10%
Jul - Sep	518,000	580,160	12%
Oct - Dec	629,000	698,190	11%
Jan - Jun	980,000	1,082,680	10%
Jul - Dec	<u>1,147,000</u>	<u>1,278,350</u>	11%
Annual	2,127,000	2,361,030	11%

It is obviously not credible to suggest that sales in Jan to Mar 2005 would be \$768,000 (i.e. \$698,190 (from Oct to Dec 2004) + 10%). The Oct to Dec quarter includes the Christmas retail peak whereas Jan to Mar sales are far lower because of summer holidays (and post-Christmas household poverty).

The best that could be said for Jan to Mar 2005 is that sales would probably be 11% higher than Jan to Mar 2004, which would be \$571,000.

It is true that for brief interruptions to simple businesses like small retailers, we might assess the sales that would have been achieved as the average of pre-loss and post-loss periods but this is only a convenient simplification and it is not valid if there is any short term seasonal distortion (like Easter) or other circumstances like special sales promotions.

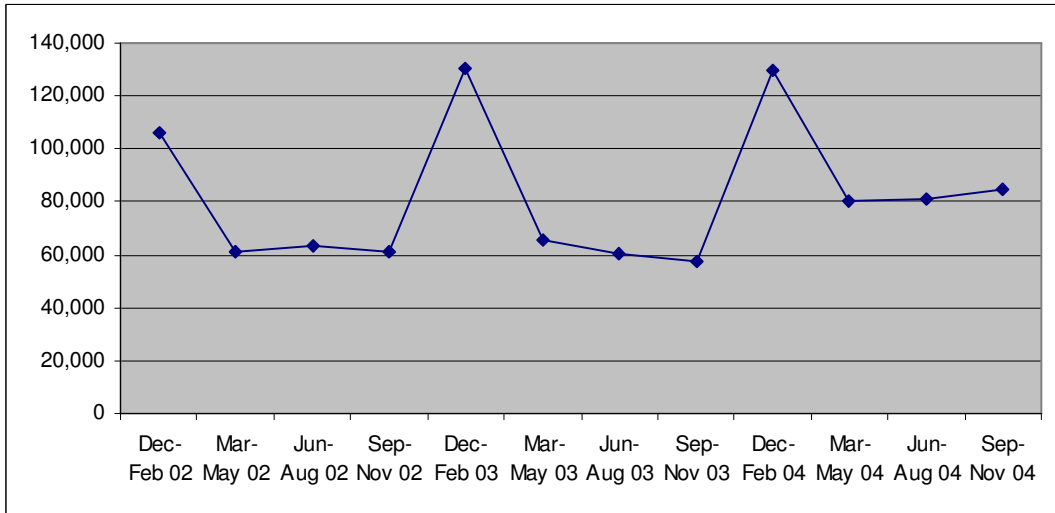
Variation Masquerading as a Trend

Consider the following 36 months of “trends” prior to a fire on 1 December 2004, unfortunately just before the expected Christmas sales peak.

	2001/02	2002/03	%Δ	2003/04	%Δ
Dec - Feb	106,306	130,659	23%	129,332	-1.0%
Mar - May	61,012	65,377	7%	80,322	23%
Jun - Aug	63,103	60,300	-4%	81,385	35%
Sep - Nov	61,430	57,503	-6%	84,600	47%
1st 6 mths	167,318	196,036	17%	209,654	6.9%
2nd 6 mths	<u>124,533</u>	<u>117,803</u>	-5%	<u>165,985</u>	41%
Annual	291,851	313,839	8%	375,639	20%

Would it be correct to conclude that the business was growing at an average of 20% over the 12 months pre-fire and that a 20% “trend” adjustment should be made to the historical Standard Turnover?

NO! This is not a trend. The business was not growing steadily over a reasonably long period pre-loss. The graph shows the pattern more clearly.



There was a major turnaround in March to May 2004 (compared to March to May 2003) when the previously flat business suddenly started to grow and it has accelerated in each of the following quarters. The explanation was that a major additional product line had been added in March 2004, which picked up momentum as the year progressed.

This leads to slightly more complicated adjustments in order to project the sales that would have been achieved but for the fire, from December 2004 to May 2005, which was the end of the maximum Indemnity Period.

First we have to add something to the Dec 2003 to Feb 2004 sales for the new product range that would have contributed significantly to the Jan to Mar 2005 results. At \$129,332, this quarter is already a peak result, which is simply the seasonal variation (Christmas sales) but it did not include any sales of the new products and so to be a fair indicator of the sales that would have been achieved in Dec 2004 to Feb 2005 the expected impact of the new products must be added.

Provided the new product line has similar Christmas appeal to the other products, a substantial adjustment (increase) is appropriate. For the sake of illustration we will use +34%, which was the average year-on-year increase over the 9 months that included the new products (May to Nov 2004), when compared to the same months of the previous year (May to Nov 2003), which did not include the new products.

	Std T'O 2003/04	Adj %	Adj Std T'O 2004/05	Actual T'O 2004/05	Loss of T'O	Loss %
Dec - Feb	129,332	34%	173,305	52,169	121,136	70%

We also need to consider an adjustment to the 2nd quarter of the interruption period.

Because the historical Standard Turnover for these 3 months (Mar to May 2004) already included the initial impact of the new product range nothing more should be added unless it is reasonable to conclude that the new products would have had a greater or lesser impact in March to May 2005 than the +23% achieved in those same months in 2004. After all, in 2004 the new product had just been introduced and its increasing impact on total sales is indicated by the greater year-on-year increases in June to August (35%) and September to November (47%). On the other hand there might be a point of saturation of the market.

In the actual case a zero adjustment was accepted as a compromise and the total reduction in turnover was assessed as follows:

	Std T'O 2003/04	Adj %	Adj Std T'O 2004/05	Actual T'O 2004/05	Loss of T'O	Loss %
Dec - Feb	129,332	34%	173,305	52,169	121,136	70%
Mar - May	80,322	0%	80,322	57,983	22,339	28%
<u>Total Reduction in Turnover</u>					<u>143,475</u>	

(As an aside I would mention that the Dec 2002 to Feb 2003 quarter, at \$130,659, was 23% greater than the same 3 months in the previous year, which is at variance with the next 3 quarters. Was this because 2002/03 was particularly high or because 2001/02 was particularly low? I would want to find out so that I was not ambushed by some business dynamic that I hadn't identified. For this case study, let us put that complication aside.)

“Other Circumstances” Masquerading as a Trend

The next example of an adjustment, which is not really a trend although described as such in the claim submission, resulted from machinery breakdown of the insured's plant on 1 March 2005. (It was not a large claim but I am very happy to deal with small claims because they are important to small businesses.)

	2003/04	2004/05	%Δ
Mar-May	26,356	28,186	7%
Jun-Aug	37,621	37,423	-1%
Sep-Nov	34,600	29,263	-15%
Dec-Feb	24,661	30,533	24%
Mar-Aug	63,977	65,609	3%
Sep-Feb	<u>59,261</u>	<u>59,796</u>	1%
Annual	123,238	125,405	2%

A superficial assumption might be that the historical Standard Turnover should be adjusted for a +2% trend, being the average over the 12 months pre-damage.

Further inquiry revealed that the business was closed for one month (mid September to mid-October 2004) because of ill health of the proprietor and the nature of the business (gentleman tailor) was such that customers could and did immediately go to the competition. Therefore the \$29,263 sales in the quarter Sep to Nov 2004 were achieved in only 2 months. A 3-month equivalent would have been \$43,895 ($\$29,263 \times 3/2$) and this is substituted to identify the real pre-damage trends.

	2003/04	2004/05	%Δ
Mar-May	26,356	28,186	7%
Jun-Aug	37,621	37,423	-1%
Sep-Nov	34,600	43,895	27%
Dec-Feb	24,661	30,533	24%
Mar-Aug	63,977	65,609	3%
Sep-Feb	<u>59,261</u>	<u>74,428</u>	26%
Annual	123,238	140,037	14%

This shows a clear step-change in the business from an average 3% growth year-on-year for March to August 2004 to 26% over Sep 2004 to Feb 2005, which needed an explanation.

The proprietor attributed the increase to the acquisition of 3 major additional customers that was a result of the recent installation of new plant and hiring another staff person. I would expect new customers to be a normal part of business growth and in some cases to be offset by the loss of other customers and so, before accepting such a substantial adjustment, although it was clearly indicated by the pre-damage results over 6 months, carried out an analysis of sales by customer. This added comfort to the conclusion I had reached that a +26% adjustment was appropriate.

Again, the mechanical or arbitrary use of the annual increase as a +2% "trend" adjustment would have done less than justice to a genuine claimant when more thorough inquiry could easily have revealed the correct adjustment.

Conclusion

- 1 In my opinion it is appropriate to make a trend adjustment based on the average growth rate over the previous 12 months if there is a steady pattern of increase or decrease in the quarterly subtotals within that period.

- 2 If the increases quarter by quarter are accelerating or decreasing the annual average increase is not a valid “trend” factor. I would use the last 6 months pre-damage or, if the business dynamics supported it, the year-on-year increase over the last 3 months pre-Damage.
- 3 A comparison of sales year-on-year does not necessarily comprise a “trend”. In particular, an adjuster must be alert to changes in the percentages, which might indicate a variation in the business or a special circumstance affecting the business. Adjustments for variations and other circumstances are slightly more difficult to identify and apply to the claim.
- 4 I have illustrated the Adjustments Clause by applying it to the historical Standard Turnover. A different methodology is usually appropriate when the index of business activity used in the claim is “Output”. The next Module in this series describes when it is appropriate to use Output as an alternative to Turnover and how to apply the Adjustments Clause to the historical Standard Output.
- 5 My examples might appear to be obvious and I have manipulated the data to make them so in order to illustrate the principles that I have derived from many years of using “trend” adjustments. Real claims are not as obvious and random variations frequently distort the patterns, hiding what is really going on within the businesses. In such cases the experience, judgement and inter-personal skills of the loss adjuster determine the outcome.

Adjusting the Rate of Gross Profit

This module applies the Adjustments Clause to the historical Standard Turnover, which is appropriate to claims under Gross Profit, Dual Wages, Loss of Revenue and Loss of Rents items. These are the items in which the claim is based directly on the loss of sales, turnover, revenue, rents, income, or whatever other term you might use for the money received for supply of the insured’s goods or services.

Adjustments to historical Standard Turnover are common, although frequently misrepresented as “trend adjustments” as explained above.

What is much less common, although of equal importance, is an adjustment to the Rate of Gross Profit. I think it is usually ignored because it is more difficult to identify and to calculate correctly and therefore fewer claimants are aware of its significance. A later module will describe how to make simple adjustments to the Rate and will show how critical it can be to the correct assessment of a financial loss claimed under a BI policy.

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