Depreciation: A Contentious Issue in Business Interruption Claims

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Abstract

Policy Wording may be clear with regards to incorporating savings and reducing the amount claimed with such savings during Business Interruption (BI) losses, however there is an on-going debate in this regard. Opinions differ whether or not depreciation could be the subject of savings when a BI claim is calculated. Depreciation forms part of the definition of a Standing Charge as per the BI Policy, however, the question arises whether depreciation ought to be viewed as a charge or an expense, and whether it is payable or not. The answer may depend on the meaning, purpose and origin of the financial term: book entry. It is plausible that an understanding of depreciation as a book entry may obviate a decision as to whether a BI claim should be based on the Additions or Difference Basis.

The insured party wants to be in a similar position after a claim settlement, had the BI not occurred. This view provides the motivation for this paper: Without the said clarity, an insured party could be severely prejudiced; hence the policy wording may need to be written in a first-order logic notation to allow for the formal reasoning about such clauses.

Insurance policies and depreciation subject literature were reviewed, and discussions with insurance claim consultants undertaken. The preliminary conclusion is that whenever depreciation is viewed as an insured expense, it will not be a saving when an asset is destroyed, since the remaining carrying amount will be claimed in the Statement of profit and loss and other comprehensive income (SPLoCI). Depreciation may not be viewed as an expense or charge payable as it does not have cash consequences, rather a fund may be created to replace an asset. This paper is the start of

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exploratory research and further work needs to be undertaken to arrive at an internationally accepted conclusion.

Keywords: Automated reasoning, business interruption, depreciation and funds, first-order logic, savings or standing charges

Introduction

Business interruption insurance policy wording is often unclear when the aspect of depreciation needs to be addressed. Such ambiguity results in much uncertainty when insurance companies assess the loss an insured party may incur based on a business interruption. Insurance companies are of the view that depreciation needs to be provided for when a business is interrupted and therefore it leads to a saving in standing charges when not provided for (Bailii 2011). However, insurance claim consultants/loss adjusters and the insured suggest it is to the detriment of the insured when depreciation is deducted from the claimable amount (Fivaz & Ogle 2010). According to Boudreaux, Rao, Underwood and Rumore (2011) the deduction of depreciation from a BI claim is a violation of the concept of indemnity because the settlement will be less than the operating cash flow if the incident had not occurred.

Depreciation is a book entry based the systematic allocation of the depreciable amount of an asset over its useful life (IASB 2011). A book entry may be defined as: 'An entry that does not have a real (eventual) cash effect on assets or liabilities of the entity and is subject to reversal in certain instances' (van der Poll 2003; Strauss 2003). From the above definition it is deduced that one of the most important characteristics of a book entry is that it does not have cash consequences.

Deducting depreciation from a claim or not remains a contentious issue: On the one hand the insurance company takes the viewpoint that whenever a company ceases to charge for depreciation in their financial statements, a saving of expenses is incurred. Hence, the claim is reduced by the amount of depreciation that would have been provided for (Bailii 2011). Steeple (2007) on the other hand is of the opinion that the charge for depreciation may be viewed as a standing charge rather than an expense payable from gross profit and should therefore not be deducted from the claim as a saving.

The layout of the paper follows: Our research questions are stated next, followed by a discussion of depreciation and the writing off or scrapping of an asset from an accounting point of view. Some approaches, viewpoints and uncertainties with regard to depreciation are presented and the main contribution of our work follows thereafter. Amongst other, we provide a decision chart of options to be taken when a business interruption takes place and we consider a number of scenarios for calculating a business interruption claim. The paper concludes with an analysis and some pointers for future work in this area.

Research Questions

Our main research question (RQ) is:

What is the effect of depreciation in the case of a Business Interruption (BI) claim?

The sub questions are:

1. In the case of a BI, should depreciation be deducted form the amount claimed? (RQ1)
2. What is the effect on depreciation in the case of a partial or complete destruction of an asset? (RQ2)

Literature Survey

Depreciation from an accounting point of view

The standard treatment of depreciation is to spread the original cost of a fixed asset over the useful life of the asset by debiting the depreciation charge account with the 'expense' and crediting the accumulated depreciation account (ACCA 2008; IASB 2011). Below is the book entry as reflected in the financial records of a company (While there are various methods to calculate depreciation, coverage of these are beyond the scope of this paper):

Debit	Depreciation charge
Credit	Accumulated depreciation

When a fixed asset is destroyed, for instance by fire, the company needs to remove the fixed asset from its Statement of Financial Position (SFP) and the fixed asset register, since they will no longer be able to use the asset. The standard procedure will be to credit the non-current asset account with the cost of the asset and to debit the asset disposal account. Furthermore, the accumulated depreciation account is debited with the accumulated depreciation of the asset and the asset disposal account will be credited with this amount, leading to a loss on the SPLoCI with regard to the scrapping of the asset (ACCA 2008).

Cost of Asset:

Debit Asset disposal account
Credit Non-current assets at cost

Accumulated Depreciation to the Point of Disposal:

Debit Accumulated depreciation account
Credit Asset disposal account

The loss on the SPLoCI may be viewed as *accelerated depreciation* since the company has to deduct the carrying amount (the balance of the cost of the asset) once off and not over the lifespan of the asset.

Different Approaches, Views and Uncertainties

In this section we present a number of different views attributed to depreciation and consider various questions that ought to be asked in an attempt to arrive at a plausible conclusion on how to treat depreciation in a BI claim.

Different Viewpoints on Depreciation

A different view on depreciation is the creation of a fund for the replacement of fixed assets. When acquiring fixed assets, companies have the choice to use either internal or external funds available to them. Internal funds are funds that are raised within a company. According to Donleavy (1994) the term funds in accounting has a limited meaning and is used to refer to net working capital, although for many people the term funds equates with cash.

Internal funds earmarked for a specific purpose are, since they are hidden in the working capital, often used to instead fund the normal operating activities of a company. Depreciation is deducted as an expense in the SPLoCI even though depreciation does not represent an outflow of cash. Therefore, the current assets are overstated in the working capital with the amount of accumulated depreciation, since the amount reflected by the bank includes the amount earmarked for the future replacement of the asset. Van der Poll (2003) argued that an internal fund should be classified separately from the working capital and that such a fund should be used for the replacement of fixed assets. Accounting for Management (2011) describes a practice called the depreciation fund method which also suggests the creation of a fund for the replacement of an asset through the charging for depreciation.

Wilson (1974:248) stated that,

> ... the sum of depreciation and retained earnings (i.e. the cash flow) is an important source of finance …. If depreciation allowances exceed the current level of capital expenditure, they may add to working capital, and eliminate the need for short-term borrowing. On the other hand, if depreciation allowances are exceeded by capital outlays, it may have the effect of depleting working capital, or requiring the company to borrow.

This coincides with the idea that arguably, one of the best ways to fund the replacement of fixed assets may be the creation of internal funds through the depreciation charge.

Correia, Flynn, Uliana and Wormald (2011) also suggest the creation of a depreciation fund because expenses such as depreciation and deferred taxation do not represent a flow of funds from the company. Actual funds like depreciation are assumed to be used to replace existing assets. Since depreciation may have as an outcome the creation of an internal fund for the replacement of fixed assets at the end of their lifespan, the insured may need to insure depreciation as an insured expense.

Depreciation does not have cash consequences for the company, i.e. the bank balance is not affected by the book entry as is the case with other expenses in the SPLoCI. For example, when depreciation is written off over, say, a ten-year period (10% per annum), the company enjoys the benefit of a lower profit and thereby a reduced taxation. The retained earnings are decreased as well as the shareholders' interest. After 10 years the company has to replace the asset using the fund that was created. However, if no fund for replacement (i.e. no internal fund reserve) has been maintained during this period, the company is faced with the reality of making use of external funding which may turn out to be an expensive venture. But if an internal fund is in place, and it is cheaper to replace the asset from this fund rather than the external fund, the company would benefit. If the company is not compensated for depreciation, they may not be in the same position they would have been, had the BI not occur.

Question with Regard to Depreciation and BI Claims

The question to be asked when a claim is calculated for a BI is whether the fixed asset was destroyed in totality, or could it be repaired and used again? If the asset was completely destroyed a company needs to discontinue depreciation on the asset because it no longer exists. However, the company would write off the carrying amount of the asset to remove the asset from their financial records and this may be viewed as an accelerated depreciation, leading to a loss on the income statement of the company with regard to the asset. However, if depreciation is counted as an insured expense, the company ought to be compensated for this loss.

If the asset was not destroyed and could be repaired, the company has to continue providing for depreciation and, therefore, the depreciation as an insured expense is to be added to the net profit to calculate the amount to be claimed.

Example 5.1

Table 1 shows how a fixed asset is removed from the financial records of a company once it becomes unusable to the company or ceases to exist, e.g. it is destroyed by fire. For example, when the asset was bought it cost the company R1 000 000 (say). Depreciation is provided for on a straight line basis at 25% per annum (R250 000). Suppose when the asset is 3 years old, it is destroyed in a fire. At that stage the accumulated depreciation is R750 000 and the carrying amount R250 000. To remove the asset from the financial records the following book entries need to be made: the asset account is credited with the original cost of R1 000 000, the accumulated depreciation of R750 000 is debited and the balance of R250 000 will be reflected in the income statement as a loss to the company. This loss of R250 000 may be viewed as an accelerated depreciation and is, therefore, an increase in the expenses of the company. Had the fire not occurred, the R250 000 would have been charged as depreciation in the following year. The table shows the original cost, accumulated depreciation, carrying amount and the book entry when the asset is destroyed.

Table 1: Removing a fixed asset from the financial records of a company

Original cost	Accumulated depreciation	Carrying amount
R1 000 000 (Dr Asset account)	(R750 000) (Cr Accumulated depreciation)	R250 000 (Balance reflected on the SFP)
Book entry when the asset is destroyed		
(R1 000 000) (Cr Asset account)	R750 000 (Dr Accumulated depreciation)	R250 000 (Dr Asset disposal account on SPLoCI)

So far we covered the actual accounting for depreciation and the book entries representing the removal of an asset. We also covered the view that the charge for depreciation may be used to create a fund for the replacement of fixed assets since there is no actual outflow of cash from the company. Next we consider some further viewpoints on the treatment of depreciation in BI claims, starting with the opinions of the CILA (Chartered Institute of Loss Adjusters).

Viewpoint of CILA on Depreciation

The CILA takes a somewhat neutral approach on the matter of how depreciation needs to be treated in a BI claim in the sense that they do not side with any particular party. That said they do, however, appear to side with the insured, viz.

> The question of whether or not depreciation should be regarded as a saving is not black and white. Although from a strict accounting

> perspective there may be an argument that it is indeed clear cut, this ignores the fact that, by taking depreciation as a saving, an Insurer is, in effect, depriving the Insured of cash that would have ordinarily accumulated in the balance sheet at the end of the maximum indemnity period, on the basis that this asset has been replaced by an equivalent asset (CILA 2011:1).

In view of the fund that is created earmarking the cash for the replacement of an asset, it follows that the Insured may indeed be deprived of cash (van der Poll 2003).

A New Zealand Perspective

Fawcett (2009) acknowledges there may be complications with BI insurance claims. They write that depreciation does not vary directly with turnover or output and it ought to be never listed in a BI claim as an uninsured expense. Again this may be interpreted as siding with the Insured, i.e. the wording of BI policies may need to be updated to include depreciation as an insured expense.

The Viewpoint of Steeple Insurance Claims Consultants

Steeple Insurance Claim Consultants were asked to give their opinion on whether depreciation should be treated as a saving under the provision of the Standard Multimark III policy wording. According to Steeple (2007) the Multimark policy states that insured standing charges are listed in the policy. Therefore, if depreciation is not listed it will not be viewed as a standing charge. They further claim:

> Depreciation is not a payment out of the coffers of the business. It is a book entry which debits the depreciation ledger account … and which credits the relevant asset account, thereby reducing the value of the asset in the books of the business.

We as authors agree with this view as is confirmed by van der Poll's (2003) and Strauss' definition of a book entry in the introduction above.

Another challenge in the wording of some BI policies is the use of the word *payable*. It states that if there is a saving in the '***charges and expenses*** *of the business* ***payable*** *out of gross profit*' the claim should be decreased (Santam 2011). According to Websters (2011) payable is defined as: '*Subject to or requiring payment especially as specified*'. Note, however, depreciation cannot be payable – it is merely a book entry. Steeple (2007) concur that in the case of the *difference basis* approach, any reduction a company has during the indemnity period ought not to be viewed as a saving for the purposes of determining a loss caused by a BI, simply because depreciation is not 'payable' out of the gross profit. Depreciation is a charge deducted from the gross profit to calculate the net profit. Next we consider the case of a company that experienced a BI after some of their assets were destroyed by fire.

The Case of Synergy Health

In this section we present some rulings put forward by a court of law in the business interruption case experienced by a company called Synergy Health (UK) Limited. The full case may be viewed in Bailii (2011), but for the purposes of this paper we present rulings #251 – 253 verbatim and thereafter propose an accounting synthesis for each. Our discussion follows a pattern (Heer & Agrawala 2006) in which we pose the ruling made by the court, followed by a summary of the ruling and there after our synthesis of the ruling.

Synergy Health (UK) Limited (Synergy Health 2011) is a company offering linen management to the health sector. There was a fire at their branch in Dunstable in which their machines were destroyed and they subsequently registered a claim for damages incurred. During a recent court case between Synergy Health Limited and five insurance companies (Bailii 2011) the following were put forward by the court.

[Ruling #251 in Bailii (2011)]: 'The second issue of principle in relation to the business interruption claim concerns the extent to which depreciation not deducted as a consequence of the fire should be brought into account as a saving, reducing the amount of the indemnity to which Synergy is entitled under the policy. The point arises in the following way. In relation to the machines at Dunstable, the financial statements at Synergy showed depreciation over the projected life of the machines'.

Summary of ruling #251
This ruling agrees with the viewpoint that since a saving of expenses has incurred, depreciation ought to be deducted from the claim of an insured.

[Ruling #252 in Bailii (2011)]: 'Synergy ceased to make a deduction in its accounts for depreciation of plant and machinery at Dunstable after the fire. The defendants submit that if Synergy does not give credit for what might be described as the cessation of depreciation, for the period until new machines were installed and depreciation resumed in subsequent accounting periods, Synergy will recover an indemnity for more than its actual loss in respect of business interruption. This is for the simple reason that, had the fire not occurred, Synergy could not have earned its gross profit (by reference to which any indemnity under the business interruption section of the policy is calculated) without having the use of the machines, in respect of which a sum of depreciation would be deducted from the gross profit in each accounting period'.
Summary of ruling #252
This ruling states that because a saving occurred when the company ceased to provide for depreciation, their claim will be higher at the insurance company than the actual loss they incurred because of the business interruption.

[Ruling #253 in Bailii (2011)]: 'It seems to me that, as a matter of principle, this analysis is unanswerable and plainly correct. On that basis, to the extent that, during the Indemnity Period, the deduction in respect of depreciation ceased to be made, that was a saving against what would otherwise have been the charges and expenses of Synergy's business. It follows that, in principle, that saving should be off-set against any claim under the business interruption section of the policy, unless the wording of the policy requires some different conclusion'.
Summary of ruling #253
The court ruled that because of the saving of expenses based on the cessation of depreciation, the amount of depreciation should be deducted from the amount claimed by the insured.

Synthesis of the Summaries
Following a natural deduction argument, the summary of the three rulings in

essence state the following (Wos 2006):

(1) The insured has a saving in expenses, since they ceased to provide for depreciation.
(2) *Therefore* the insured will have a higher claimed amount from the insurer.
(3) *Therefore* the insured ought to deduct the depreciation from the claimed amount.

In logical notation we may formalise the semantics of the above three statements as formula (2.1) below (statement (1) implies statement (2) and together they imply statement (3)), viz:

$$[(1) \rightarrow (2)] \rightarrow (3) \qquad (2.1)$$

The value in formalising natural language statements and their consequents (the *Therefore* clauses above) into a formula like (2.1), is that one may reason formally about the validity of the statements as well as determining whether a statement logically follows from another one (Harrison 2009). This process may furthermore be automated, yielding clear benefits.

Depreciation as an Insured Expense

Business interruption insurance provides two ways whereby cover may be provided to an insured party: the *additions basis* and the *difference basis*. The wordings pertaining to the limited loss in gross profit of these two ways are reflected in Appendix A (Santam 2011). The definitions of difference and additions base are essentially the same except for the following:

'… less any sum saved during the indemnity period in respect of such of the …'

- **charges and expenses** of the business **payable** out of gross profit (Difference basis)
- insured **standing charges** (Additions basis)

'as may **cease or be reduced** in consequence of the Damage'.

In the instance where an insured makes use of the *difference basis* the insurance company will deduct the sum saved during the indemnity period in respect of charges and expenses payable. This raises the question of what does payable mean in this context? Farlex (2011) defines payable as being '*subject to or requiring payment especially as specified*'. Depreciation is not payable; it is merely a book entry to comply with the systematic allocation of a depreciable amount of an asset over its useful life as suggested earlier. Therefore, depreciation may not be deducted as a sum saved during the indemnity period as it does not comply with the definition of payable. This answers our 1st research question (RQ1) above.

The *addition basis* refers to a saving in the standing charges of a company which is reduced or ceases to exist. Wordingplus (2011) defines a standing charge as the,

> expenses which do not change in direct proportion to changes in sales (i.e., fixed and semi-fixed costs such as taxes, rent and insurance). The definition of Standing Charges specifically excludes ordinary payroll and therefore, ordinary payroll is not insured unless a specific extension of cover is selected to include it.

Fawcett (2009) argues that depreciation does not vary directly with turnover or output and should therefore be viewed as an insured expense. This is also claimed by Cloughton (1991) that the decrease in turnover does not have an effect on the amount of depreciation provided and therefore depreciation needs to be an insured expense. Although depreciation is not specifically mentioned as a standing charge one needs to determine whether it may be included in this definition.

Depreciation does not have cash consequences and is, therefore, added back in the Statement of Cash Flows of companies as it is a non-cash flow item (Sowden-Service 2010). If depreciation is not payable, does not have cash consequences and does not fall under the definition of a standing charge unless specified, the question arises whether depreciation will have any effect on the calculation of the gross profit during the indemnity period. It is suggested to clarify this uncertainty, policy wording needs to be adjusted to specifically address depreciation and how to deal with it. Note that Fawcett (2009) agrees with this solution as pointed out in the New Zealand perspective. Therefore, when policy wording is changed to include depreciation as an insured expense, it will also not be deducted from the insurance claim, confirming our earlier answer to RQ1. Next we synthesise the above discussions and viewpoints into a decision diagram depicted in Figure 1.

Decision Diagram of Options

The crucial question is whether the insured asset has been destroyed completely, or whether it can be fixed or repaired. This then determines whether any further charge for depreciation should occur or not. Figure 1 provides the detail.

Figure 1: Decision diagram for depreciation

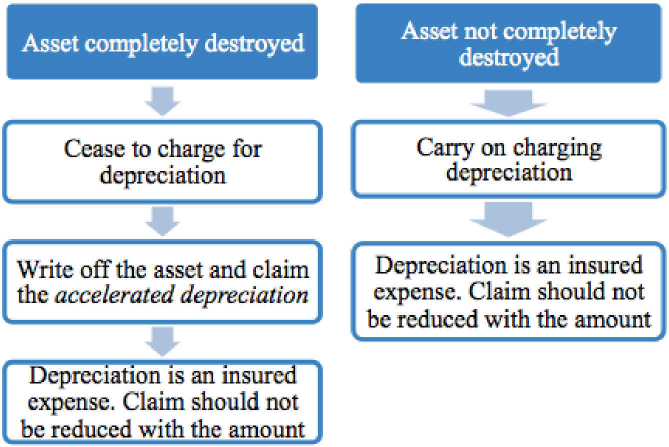

Figure 1 classifies depreciation to be an insured expense that ought not to be deducted from the claimed amount, irrespective of whether the asset has been partially or completely destroyed. This answers our 2nd research question (RQ2).

Scenarios with regard to BI Claims

Fawcett (2009) indicated in an example how a company will be in the same position after a BI claim than without the claim. This scenario is illustrated in the *first* calculation in Figure 2. In the *second* example the writing off of an asset is included in the books of the insured and in the claim. Again the loss without a BI taking place and after a claim was made, reconciles to the same amount. In the *third* example the insured did not take the effect of the write-off of an asset into account and it appears that the insured remains in a similar position. However, if the insured realises afterwards that they excluded the amount written off (*accelerated depreciation*), they lost R500 000 due to the business interruption (*fourth* calculation). Therefore, clients of insurance companies need to be made aware of the correct treatment of a destroyed asset.

Figure 2: Some BI Scenarios

	Example for Brett Fawcett (Fawcett, 2009)			
	Standard	**Actual**	**Reduction**	**Reconciliation**
Sales	12,000,000	8,400,000	3,600,000	8,400,000
Material	8,300,000	5,810,000	2,490,000	5,810,000
Gross profit	**3,700,000**	**2,590,000**	**1,110,000**	**2,590,000**
Wages	(2,200,000)	(2,500,000)	300,000	(2,500,000)
Depreciation	(250,000)	(250,000)		(250,000)
Rent	(150,000)	(150,000)		(150,000)
Salaries	(500,000)	(500,000)		(500,000)
Wages admin	(225,000)	(225,000)		(225,000)
Other	(412,000)	(352,000)	(60,000)	(352,000)
Total expenses	(3,737,000)	(3,977,000)	240,000	(3,977,000)
Net operating profit	**(37,000)**	**(1,387,000)**	**1,350,000**	**(1,387,000)**
			Claim	1,350,000
			Loss after claim	**(37,000)**

Figure 3: Some BI Scenarios (Continued)

	Including write off of asset in calculation			
	Standard	**Actual**	**Reduction**	**Reconciliation**
Sales	12,000,000	8,400,000	3,600,000	8,400,000
Material	8,300,000	5,810,000	2,490,000	5,810,000
Gross profit	**3,700,000**	**2,590,000**	**1,110,000**	**2,590,000**
Wages	(2,200,000)	(2,500,000)	300,000	(2,500,000)
Depreciation/Write off assets	(250,000)	(500,000)	250,000	(500,000)
Rent	(150,000)	(150,000)		(150,000)
Salaries	(500,000)	(500,000)		(500,000)
Wages admin	(225,000)	(225,000)		(225,000)
Other	(412,000)	(352,000)	(60,000)	(352,000)
Total expenses	(3,737,000)	(4,227,000)	490,000	(4,227,000)
Net operating profit	**(37,000)**	**(1,637,000)**	**1,600,000**	**(1,637,000)**
			Claim	1,600,000
			Loss after claim	**(37,000)**

Figure 4: Some BI Scenarios (Continued)

If a company did not claim for the write off of an asset in the claim				
	Standard	**Actual**	**Reduction**	**Reconciliation**
Sales	12,000,000	8,400,000	3,600,000	8,400,000
Material	8,300,000	5,810,000	2,490,000	5,810,000
Gross profit	**3,700,000**	**2,590,000**	**1,110,000**	**2,590,000**
Wages	(2,200,000)	(2,500,000)	300,000	(2,500,000)
Depreciation/Write off assets	(250,000)		(250,000)	-
Rent	(150,000)	(150,000)		(150,000)
Salaries	(500,000)	(500,000)		(500,000)
Wages admin	(225,000)	(225,000)		(225,000)
Other	(412,000)	(352,000)	(60,000)	(352,000)
Total expenses	(3,737,000)	(3,727,000)	(10,000)	(3,727,000)
Net operating profit	**(37,000)**	**(1,137,000)**	**1,100,000**	**(1,137,000)**
			Claim	1,100,000
			Loss after claim	**(37,000)**

Figure 5: Some BI Scenarios (Continued)

If a company did not claim for the write off of an asset in the claim				
	Standard	**Actual**	**Reduction**	**Reconciliation**
Sales	12,000,000	8,400,000	3,600,000	8,400,000
Material	8,300,000	5,810,000	2,490,000	5,810,000
Gross profit	**3,700,000**	**2,590,000**	**1,110,000**	**2,590,000**
Wages	(2,200,000)	(2,500,000)	300,000	(2,500,000)
Depreciation/Write off assets	(250,000)	(500,000)	250,000	(500,000)
Rent	(150,000)	(150,000)		(150,000)
Salaries	(500,000)	(500,000)		(500,000)
Wages admin	(225,000)	(225,000)		(225,000)
Other	(412,000)	(352,000)	(60,000)	(352,000)
Total expenses	(3,737,000)	(4,227,000)	490,000	(4,227,000)
Net operating profit	**(37,000)**	**(1,637,000)**	**1,600,000**	**(1,637,000)**
			Claim should have been	1,600,000
			Real claim	(1,100,000)
			Loss after claim	**500,000**

Revisiting the Research Questions

Our main research question and two sub questions were given earlier. With respect to the main main research question, the effect of depreciation on a BI claim was discussed above with reference to the accounting point of view and various other viewpoints. The verdict of a court case was also presented.

Our 1st sub research question (RQ1), namely whether depreciation should be deducted from a claimed amount was answered above in the context of an insured expense: Depreciation ought not to be deducted from a claimed amount.

The 2nd sub research question (RQ2) pertaining to a partial or complete destruction of an asset was answered in Figure 1: In both cases the claim should not be reduced with the depreciation amount.

Analysis and conclusion

In this paper we investigated depreciation as a book entry in accounting and suggested that the write-off value of an asset be called accelerated depreciation. The suggestion was also made that the charge for depreciation ought to be addressed in the form of an internal fund for the replacement of assets. This may result that a saving in expenses deducted from a claim by the Insurer when depreciation ceased may be to the detriment of the Insured. If depreciation is viewed as an insured expense and the Insured pays an increased premium based on this, the Insured should be compensated for the insured expense of depreciation and not penalised because they ceased to provide for depreciation. An investigation into policy wording which surrounds expenses payable or a saving in insured expenses was also undertaken. To this end it is clear that insurance contracts ought to be drawn up with due care. Writing parts of a contract in a formal notation may alleviate some of the said problems.

The contribution of the paper is that depreciation should be viewed as an insured expense and that an internal fund ought to be created to finance the replacement of fixed assets when the need arises. A number of research questions were posed around these ideas and were answered on the strength of the investigations and discussions presented in this paper.

Future Work

A number of viewpoints on the treatment of depreciation in the case of a BI claim was considered. While we made some recommendations in this regard, it is not suggested that these proposals be an indication of an internationally accepted treatment of depreciation in BI claims. More research needs to be undertaken on all aspects of depreciation and insurance policies to arrive at an acceptable standing which could give clear guidance on how contentious issues should be treated. Such standing should not be to the detriment of either the Insured or the Insurer. Once these resolutions have been implemented, case studies have to be conducted over time to determine the success of these recommendations.

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Appendix A - Santam (2011) BI Policy Wording

Item 1 Gross Profit (difference basis)
The insurance under this item is limited to loss of gross profit due to:

a) **Reduction in turnover** and
b) **Increase in cost of working**

And the amount payable as indemnity hereunder shall be

a) **in respect of reduction in turnover** the sum produced by applying the rate of gross profit to the amount by which turnover during the indemnity period shall, in consequence of the Damage, fall short of the standard turnover.
b) **in respect of increase in cost of working** the additional expenditure necessarily and reasonable incurred for the sole purpose of avoiding or diminishing the reduction in turnover which, but for that expenditure, would have taken place during the indemnity period in consequence of the Damage, but not exceeding the sum produced by applying the rate of gross profit to the amount of the reduction thereby avoided

less any sum saved during the indemnity period in respect of such of the charges and expenses of the business payable out of gross profit as may cease or be reduced in consequence of the Damage, provided that the amount payable shall be proportionately reduced if the sum insured in respect of gross profit is less than the sum produced by applying the rate of gross profit to the annual turnover where the maximum indemnity period is 12 months or less, or the appropriate multiple of the annual turnover where the maximum period exceeds 12 months.

Item 1 Gross profit (additions basis)
The insurance under this item is limited to loss of gross profit due to:

c) **Reduction in turnover** and
d) **Increase in cost of working**

And the amount payable as indemnity hereunder shall be

c) **in respect of reduction in turnover** the sum produced by applying the rate of gross profit to the amount by which turnover during the indemnity period shall, in consequence of the Damage, fall short of the standard turnover.

d) **in respect of increase in cost of working** the additional expenditure necessarily and reasonable incurred for the sole purpose of avoiding or diminishing the reduction in turnover which, but for that expenditure, would have taken place during the indemnity period in consequence of the Damage, but not exceeding the sum produced by applying the rate of gross profit to the amount of the reduction thereby avoided

less any sum saved during the indemnity period in respect of such of the insured standing charges as may cease or be reduced in consequence of the Damage, provided that the amount payable shall be proportionately reduced if the sum insured in respect of gross profit is less than the sum produced by applying the rate of gross profit to the annual turnover where the maximum indemnity period is 12 months or less, or the appropriate multiple of the annual turnover where the maximum period exceeds 12 months.

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