CHAPTER 9

GENERAL CONTINGENCIES

Summary: *The deduction for general contingencies reflects the court's subjective impression as to the adequacy, or otherwise, the comparative utility, of the primary actuarial calculations. Although collateral benefits are sometimes viewed as part of the general contingencies the risks attaching to what has been, or will be lost, are the major component of the deduction. Allowance for such risks can equally be achieved through an increase to the discount rate of return.*

[9.1] INTRODUCTION

[9.1.1] Early judgments: The adjustment for general contingencies enables the court to give expression to its overall feelings about the basic actuarial calculation. The primary purpose of the adjustment is to allow for risk and uncertainty.[1] Few texts communicate the nature of general contingencies more vividly than the English judgments which first introduced it as an explicit adjustment:

> `She had lost an annuity for the joint lives of herself and her son... The value of the annuity spoken to in the evidence was the value of an annuity on government or other very good security, and that the annuity lost was that secured by the personal security of the deceased and, therefore, of much less value'.[2]

> `When the Fatal Accidents Act, 1846, was passed, it was thought for a short time by some that damages might be given "to the full extent of a perfect compensation"... "It would be most unjust" (however) "if whenever an accident occurs, juries were to visit the unfortunate cause of it with the utmost amount which they think an equivalent for the mischief done"'.[3]

> `A thousand circumstances might have prevented him from making that income if he had remained well, and the accident had not happened... the jury would be wrong if they did not consider those circumstances as upon the doctrine of chances'.[4]

[9.1.2] All embracing adjustment: The adjustment is not confined to considerations of risk and uncertainty: The court may, for instance, wish to make adjustments for taxation or costs saved by the victim with no longer having to travel to work on a daily basis. The court may feel that the earnings basis used as input for the calculation is too low or too high. The court may wish to make allowance for the chance of future employment in the injured condition.[5] Such considerations of

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[1] `Risk' is the prospect that things may not turn as out as expected. `Uncertainty' is doubt as to the correctness of existing verifiable information.

[2] *Rowley v London & NW Rail* [1861-73] All ER Rep 823 (Exch) 828.

[3] *Rowley v London & NW Rail* [1861-73] All ER Rep 823 (Exch) 829-30.

[4] *Phillips v London & SW Rail* [1874-80] All ER Rep 1176 (CA) 1180-1.

[5] For further items see Koch `Damages' 59 62.

factual input can, however, also be corrected by referring the matter back to the actuaries for a recalculation using inputs dictated by the court.[6]MMF

[9.1.3] Implicit adjustments: In Roman-Dutch times the adjustment was introduced by an implicit scaling down of the input parameters: `Since proof of damage is difficult, the judge should in doubtful cases adopt the course most favourable to the defendant and award low damages rather than high damages'.[7]

[9.1.4] Deductions used in practice: In general the deduction for contingencies will increase with the lengthening of the period of risk. A short period of past loss of one to three years may attract no deduction at all whereas a five or seven year period may well justify some deduction. For future loss one finds a deduction of 20% being made for a man in his 20's but only 10% for a claimant aged 46.[8] For a man close to retirement a low or nil deduction may be more appropriate. These percentages suggest a formula of ½% per year of working life to 65 as a general guide to the sort of deduction that is usual. The formula has intuitive appeal giving expression to the concept of a widening funnel of doubt[9] as one extends the earnings projections into an increasingly dim and distant future. The formula presumes a person with only moderate job stability. For a person with a proven history of job stability the deduction may well be much less. For a person with a history of frequently interrupted employment the deduction might rise as high as 33%[10] to 50%,[11] even for past losses.[12] The self-employed person and the employee with substantial overtime would be assessed as having a higher risk profile than an employee who draws a regular salary. The earnings of an employee who enjoys substantial insurance cover and pension benefits will generally have a lower risk profile than for the employee who does not enjoy such benefits.[13] Further risks such as divorce[14] or remarriage[15] would be additional to these percentages. In the event of injury leading to a partial loss of earning capacity the court may assign different contingencies to the career

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[6]*Nochomowitz v Santam Insurance* 1972 1 SA 718 (T) 728 `The matter will now stand down until such time as the actuaries have completed their calculations on the aforegoing basis. It may then be mentioned again for the purpose of leading further evidence, if necessary, and of enabling me to make such final awards or orders as may be appropriate'. See too *Smart v SAR&H* 1928 NPD 361; *Snyders v Groenewald* 1966 3 SA 785 (C); *Bailey v Southern Insurance* 1981 3 C&B 178 (C); *Dusterwald v Santam Insurance* 1990 4 C&B A3-45 (C). A court that has adopted this procedure cannot be said to have considered the general equities of the case if it has not been informed of the result of the recalculations (*Nochomowitz v Santam Insurance* 1972 3 SA 640 (A) 644H).

[7]Erasmus 1975 *THRHR* 268 269inf. D50.17.125 `*Favorabiliores rei potius quam actores habentur*' cited in *Bay Passenger Transport v Franzen* 1975 1 SA 269 (A) 274H.

[8]*Goodall v President Insurance* 1978 1 SA 389 (W) 393.

[9]Redington 1952 *JIA* 286 287 `Thus we may say that there is an expanding funnel of doubt. The contours of the funnel vary with each one of us, for the concept is personal. Nevertheless, they must inevitably have much in common, since they all start from a common point now'.

[10]See, for instance, *King v Geldenhuys* 1983 3 C&B 379 (C) 381inf.

[11]*AA Mutual Insurance v Maqula* 1978 1 SA 805 (A) 813D.

[12]*AA Mutual Insurance v Maqula* 1978 1 SA 805 (A) 813D.

[13]See 151 .

[14]*De Jongh v Gunther* 1975 4 SA 78 (W) 83E-F.

[15]*Legal Insurance v Botes* 1963 1 SA 608 (A) 617G.

path but for the injury and the career path having regard to the injury.[16]

[9.1.5] More than just days unemployed: It would be a gross oversimplification to view the deduction for general contingencies as a number of days or weeks per year of unemployment. A massive loss of earnings can arise merely because future salary increases fall behind inflation by 1% or 2% per year. Seemingly stable employees have been known to suffer substantial capital losses over short periods of time through unsuccessful attempts to set up their own businesses or to emigrate overseas.

[9.2] RELEVANT CONSIDERATIONS
[9.2.1] Insurance reduces the risks of life: The qualities that render a man a stable employee and a good wage earner are much the same qualities that will lead him to insure himself against risk.[17] Earning capacity is not merely the ability to generate earnings but also the ability to minimize the risks attaching to continuing income.[18] The deduction made for general contingencies when assessing loss of earning capacity[19] is in one sense[20] the notional insurance premium needed to render future earnings free of all risk. Many employers today provide substantial insurance cover as part of the remuneration package. This relieves them of the moral pressures which would otherwise arise to provide gratuitous benefits in the event of an accident befalling an employee. The future income of employees so protected is subject to less risk, that is say contingencies, than the income of an employee who does not enjoy insurance cover.

The self-employed person who insures himself will have to pay the premiums from his earnings. For an employee there will often be little or no deduction from his basic earnings, the majority of the cost being met the employer. An employer is less likely than an employee to allow insurance cover to lapse. The average self-insured income earner thus has a higher risk profile than the average employer-insured employee.

[9.2.2] The unemployed victim: An adult victim may have been inbetween jobs at the time of the injury or death. Even for persons who were in employment at the time of the injury or death it is common that the employer has by the time of the trial ceased trading or engaged in major layoffs. Such circumstances may justify a substantial contingency deduction of 10% to 50% or more when assessing past loss

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[16]*Hutchings v General Accident Insurance* 1986 3 C&B 737 (C) (10% & 20%); *Venter v Mutual & Federale Versekeringsmpy* 1988 3 C&B 749 (T) (10% & 25%); *Brink v The MVA Fund* 1991 (C) (unreported 2.8.91 case 6038/89) (15% & 30%). More generally see Koch `Damages' 164-5 and 219# below.

[17]McGregor 1965 *MLR* 629.

[18]Where earnings are highly at risk a large deduction will be made for general contingencies (see, for instance, *AA Mutual Insurance v Maqula* 1978 1 SA 805 (A) 813; *King v Geldenhuys* 1983 3 C&B 379 (C) 381).

[19]See, for instance, *Goodall v President Insurance* 1978 1 SA 389 (W) 393F-G for a general discussion of what deductions are usual.

[20]The deduction for general contingencies is concerned with very much more than just pure risk.

of earnings or support.[21]   For an unemployed person the chances of finding
employment will increase with the passage of time.   The deduction for general
contingencies for future loss will thus in certain instances **be less than** the deduction
applied to past loss.

For an unemployed child or young adult who has never worked there will be
uncertainty not only as regards the finding of employment when the time comes but
also as regards educational progress. This consideration is particularly relevant when
the education system is subject to major disruptions. Education on its own does not
guarantee a job. The industrial psychologists who testify as to the potential earnings
of a victim tend to have regard to potential rather than likelihood.[22]   The more
common salary surveys used for these estimates are based on the salary structures of
large corporations in the formal sector.[23]   Indications are that rates of pay in the
informal sector are about half of the rates for the formal sector.[24]   In *Southern
Insurance v Bailey*[25] a contingency deduction of 25% was applied despite substantial
positive factors such as an unduly low earnings basis for the actuarial calculation.
In *Khuduge*'s case[26] the claimant had never worked but the court, in a somewhat
maverick mood,[27] saw fit to make no deduction whatsoever for general
contingencies.[28]

One may expect the deduction for general contingencies for an unemployed victim
to be substantially greater than for an employed victim of the same age and having
regard to the same employment.

[9.2.3] Costs of travelling to and from work: The deduction for general contingencies
sometimes includes allowance for the saved costs of travelling to and from work and
the saved cost of work clothes.[29] In those instances where a deduction has been made

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[21]For example see the 50% deduction applied in *AA Mutual Insurance v Maqula* 1978 1 SA 389 (W)
393G-H. See too 220 below.

[22]Property valuators refer to `highest and best use' for land (see 30 above). In *Carstens v
Southern Insurance* 1985 3 SA 1010 (C) 1020G the court emphasised that compensation should be based on
probable earnings rather than potential earnings (see 235 below).

[23]See footnote 87. *Business Day* February 11, 1993 at 4 reports that only about 45% of the population is
employed in the formal sector. True unemployment, the article states, is more like 7% to 12% with roughly half the
workforce employed or self-employed in the informal sector. See next footnote. Only 8,5% of persons entering the
job market find employment in the formal sector.

[24]I base this observation on claims processed by my office. Not the least factor in this
regard is the negotiating power of the trade unions.

[25]*Southern Insurance v Bailey* 1984 1 SA 98 (A) 117.

[26]*Khuduge v Santam Insurance* 1991 (W) (unreported 23.5.91 case 4637/90).

[27]The defendant seems have had inadequate legal representation because elsewhere in the
judgment the full costs of a bed are awarded without deduction for what claimant would
have spent on a bed and mattress had he not been injured.

[28]See too *Guardian National Insurance v Engelbrecht* 1989 4 SA 908 (T) where a nil deduction was approved by
an appeal bench of three judges. For an employed victim in his 20's the usual deduction according to the ½% per
year formula would be about 20%.

[29]*Kontos v General Accident Insurance* 1989 4 C&B A2-1 (T) lists the saved costs of travelling to and from work as
one of the factors to be borne in mind when assessing general contingencies; see to Corbett & Buchanan 3ed 66-7.

for travelling costs it has been about 8% of earnings.[30] If the usual deductions for general contingencies included an allowance for saved travelling costs then the deduction for both past and future losses should not reduce below 8%. The deductions generally made do not follow this pattern[31] so we must conclude that many such deductions have not included allowance for saved travelling expenses. It needs be borne in mind that travelling costs are not saved by a victim who continues to work, albeit at a lower rate of pay. A deduction for saved travelling costs should also not be made from the value of a pension which the victim would have enjoyed had he not been injured or killed.[32] This saving is sometimes offset after the injury by the costs of travelling to obtain medical attention.

[9.2.4] *Early retirement*: Medical experts quite frequently prognosticate that the injuries suffered by a victim, who has remained in employment, will bring about retirement at an earlier age than had there been no injury.[33] It is also common practice to allow a higher percentage deduction for general contingencies for the injured condition than for the uninjured condition, the allowance for reduced mobility in the job market, otherwise known as `reverse contingencies'.[34] A court faced with such considerations needs to exercise care that the contingency of early retirement is not brought into account twice, once by way of explicit allowance for early retirement in the actuarial calculation, and then again by way of general contingencies.[35]

[9.2.5] *Divorce*: With claims for loss of support the deduction for general contingencies would need to include allowance not only for the risks attaching to the deceased's employment but also for the risk of divorce. If one in five marriages, that is to say 20%, are ending in divorce then one would expect an add-on to the usual contingency percentages of about 10%.[36] This suggests normal contingency deductions of about 30% for young couples.[37] The add-on for divorce will probably reduce to close to zero for ages of 55 and over. Although maintenance may be provided on divorce this is often of short duration pending employment by the ex-wife. For children from lower income groups there is a high incidence of failure by fathers to comply with maintenance orders.[38] It follows that the contingency of divorce is relevant to the claims by the children.

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[30]Deductions for travel costs were made in *Sumesur v Dominion Insurance* 1960 1 C&B 228 (D) 232-3 (7,5% deducted); *Maasberg v Hunt Leuchars & Hepburn* 1944 WLD 2 12 (9%). There may of course be alternative costs with travelling to medical centres. See 226 below.

[31]0% for past loss; ½% per year to retirement for future loss (see 150).

[32]See 155.

[33]See, for instance, *Dusterwald v Santam Insurance* 1990 4 C&B A3-45 (C) 70-2.

[34]See 219.

[35]*Dusterwald v Santam Insurance* 1990 4 C&B A3-45 (C) 72 `Self-evidently, this finding incorporates a built-in contingency allowance'.

[36]One half of 20% assuming that divorce occurs on average at ages of about 40 to 45. Available statistics indicate divorce rates of about 1% per year with higher rates for marriages concluded more recently (see 289).

[37]20% according to the ½% per year formula plus 10% for divorce.

[38]See Burman `*African Customary Law*' 36-51 and 307 below.

[9.2.6] Early death: The standard actuarial calculation includes full allowance for the risk of early death[39] and the deduction for general contingencies should thus make no allowance for this consideration. Exceptions to this rule arise when the calculation has not been done by an actuary[40] and when the evidence indicates heavier mortality, a greater risk of early death, than has been allowed for in the actuarial calculations.[41]

[9.2.7] Medical and related expenses: A deduction for general contingencies will be made from the present value of future medical treatment and assistative persons or devices.[42] This would reflect the chance that the relevant expense may not be incurred or that cheaper alternatives may come available. An expert may recommend a device or a procedure but a compensated victim may thereafter not wish to follow the advice. Conversely allowance should be made for the unforeseen costs of complications. Advances in medical science may devise a cure for paraplegia.[43] These issues will be discussed below under damages for personal injury.[44]

[9.2.8] Layers of earnings: The risk attaching to earnings varies not only with time but also with the level of earnings. The top layer of earnings is subject to much greater risk than the lower levels. This is particularly obvious with overtime earnings or commission earnings added to a basic salary. An employer who wishes to reduce an employee's salary may achieve this merely by discontinuing increases to offset inflation. The vast majority of employment contracts do not entitle an employee to increases to offset the effects of inflation. The extent to which such increases are granted by an employer depends on the relative negotiating strengths from time to time of employer and employee. The same is true of salary increases associated with promotions. In analysing general contingencies one might thus distinguish between:

* Basic earnings at time of delict.
* Future increases to offset the effects of inflation.
* Future increases associated with promotions.
* Overtime and commission earnings.

Basic earnings would only be lost in the event of total unemployment not covered by unemployment insurance or sick pay.[45] The risks attaching to the higher levels of

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[39]See 87.

[40]Where the `Murfin method' has been used (see Newdigate & Honey `MVA Handbook' 166-73) then for injury claims adequate allowance will have been made for the risk of early death. When a widow claims for loss of support the `Murfin method' does not make an adequate deduction for the joint-life risks of early death.

[41]See, for example, *Carstens v Southern Insurance* 1985 3 SA 1010 (C) 1027J.

[42]*Administrator-General SWA v Kriel* 1988 3 SA 275 (A) (25%); *Van der Plaats v SA Mutual Fire & General Insurance* 1980 3 SA 105 (A) 113-14 (5%); *Erdmann v Santam Insurance* 1985 3 SA 402 (C) 405D (50%); *Ncubu v NEG Insurance* 1988 2 SA 190 (N) 198B (15%); *Hutchings v General Accident Insurance* 1986 3 C&B 737 (C) 745 (30%). In *Dusterwald v Santam Insurance* 1990 4 C&B A3-45 (C) different deductions were applied to different classes of expenditure.

[43]See *Time Magazine* December 14 1992 at 48.

[44]See section 12.9$.

[45]This is essentially the risk analyzed by Luntz `Damages' 295-303 but without allowance for cataclysmic events.

earnings would require progressively larger percentage deductions. The earnings of the self-employed generally include a core income of fairly low risk plus a fluctuating upper layer which behaves like overtime or commission income.

High levels of unemployment may lead to low levels of overtime as unions seek to preserve jobs.   Employers who fear industrial court actions when laying off employees may well prefer higher levels of overtime, certainly to meet temporary exigencies. Fairly heavy deductions for general contingencies are appropriate if the earnings calculation includes allowance for substantial overtime.[46]

[9.2.9] Risk attaching to pensions: Once an employee has retired on pension his income is then not necessarily free of risk. If his pension is funded entirely from accumulated capital then the level of risk would equal that attaching to the capital itself and its investment potential. However, a number of major pension funds are not fully funded,[47] a factor which calls into the question the sustainability of increases to pensions in payment. The ability of such funds to continue payments, let alone make increases to offset inflation, may depend on the willingness of the original employer to continue to apply profits to the benefit of non-productive pensioners.[48] Active employees may well begrudge increases for pensioners at the expense of increases for themselves. The risks attaching to future pension payments will often be no better than the risks attaching to the primary business venture which funds the pension payments. Actuaries generally escalate future pensions at rates below the rate of inflation.[49] A positive contingency would then be the prospect of full inflation linking.

There is an increasing tendency by employers to provide disability income benefits in lieu of an early retirement pension. These benefits provide for the guaranteed payment of 100% of the employees salary for a period of 12 to 24 months after the cessation of employment. The benefit then reduces to 75% of salary and continues until normal retirement. At the normal retirement age a retirement pension is then provided based on the disability income being paid at the time of retirement. The disability income is usually subject to an ongoing deduction by way of a pension contribution. The policy conditions usually provide for the disability income to reduce or cease if the victim takes up alternative gainful employment. The contingencies attaching to these disability income benefits can be quite high particularly when future increases to the income, and even the income payments themselves, are subject to the discretion of the employer.

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[46]What is substantial will depend on the type of work being done. Some jobs, such as engine driver for the railways, require regular overtime. For some employers paying overtime is preferable to paying salary for a number of reasons: Overtime usually does not give rise to increased bonus and expensive pension entitlements, and it relieves the employer of the need to employ additional staff with scarce skills or long on-the-job training requirements.

[47]See, for instance, Wassenaar `Squandered Assets' 75-117.

[48]Pensions payable in terms of the Workmen's Compensation Act 30 of 1941 have a sorry track record (increases have been 10% in 1987; 15% in 1989; 10% in 1991; 6% in 1992) averaging about 40% of the rate of inflation compared to the 67% to 100% of inflation that is achieved by most pension funds.

[49]Observation based on several thousand reports received over the years by my office.

In general the risks attaching to a pension are less than those attaching to earnings. Not the least because the ill-health or changed life plan of the recipient will not affect the pension payments, except, of course, if the events bring about an early death. An injured victim may receive a substantial early retirement pension from his employer. It is tempting to argue that when assessing damages a lesser deduction for general contingencies should be applied to the pension benefits than to the earnings but for the injury. There is much to be said for this approach provided it is borne in mind that the availability of substantial disability-insurance cover provided by the employer substantially reduces the general contingencies for the overall earnings.[50]

[9.2.10] Subjective impression: The adjustment is assessed on the basis of subjective impression rather than objective calculation.[51] The opinion of an actuary as regards general contingencies has in the past been condemned[52] but in more recent years accepted without demur.[53] A number of analysts have observed that the deductions made in practice do not bear any sensible relation to unemployment statistics.[54] The focus on a quasi-irrational impression[55] leads to a preference for round percentages such as 5% 10% or 20%.[56] In many earlier judgments awards were adjusted to round sums of money.[57] These factors all point to a subliminal pricing psychology.

[9.2.11] Consistency between awards: In theory the adjustment for general contingencies is assessed *de novo* for each new matter. In practice the need for consistency between awards leads to guidance being sought from past judgments[58]

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[50]See 151.

[51]*Shield Insurance v Booysen* 1979 3 SA 953 (A) 965G `The determination... for such contingencies involves, by its very nature, a process of subjective impression or estimation rather than objective calculation'; *Sigournay v Gillbanks* 1960 2 SA 552 (A) 569A.

[52]*Shield Insurance v Hall* 1976 4 SA 431 (A) 444F `Mr Murfin is a consulting actuary. He is in no position and is not qualified to give evidence as to the hazards and contingencies applicable to any particular type of work'. This was a most unfair condemnation of a man with extensive experience in compensation work.

[53]See, for instance, *Brink v The MVA Fund* 1991 (C) (unreported 2.8.91 case 6038/89) (15% uninjured, 30% injured). Some actuaries handle in excess of 1000 claims a year. The actuary who testifies in this regard provides guidance as to the established legal norms, not the implications of statistical analysis. Actuarial evidence on contingencies should, however, be received with care because the actuary will usually not have heard all the evidence presented to the court.

[54]Street `Damages' 120-5; Cooper-Stephenson & Saunders `Damages in Canada' 255-9; Luntz `Damages' 2ed 295-300; Boberg 1964 *SALJ* 194 212. In South Africa unemployment statistics do not give a reliable guide to actual unemployment levels. Outright unemployment is not the only contingency. Also to be considered is the risk that wage escalation will fall behind inflation or that the claimant may have ventured unsuccessfully into self-employment.

[55]Colourfully described in *Goodall v President Insurance* 1978 1 SA 389 (W) 392-3 `In the assessment of a proper allowance for contingencies, arbitrary considerations must inevitably play a part, for the art or science of foretelling the future, so confidently practised by ancient prophets and soothsayers, and by modern authors of a certain type of almanack, is not numbered among the qualifications for judicial office'.

[56]See table in Koch `Damages' 334-8.

[57]*Clair v PE Harbour Board* (1886) 5 EDC 311 317 318; *Waring & Gillow v Sherborne* 1904 TS 340 349-50; *Chisholm v ERPM* 1909 TH 297 302; *Union Government v Clay* 1913 AD 385 389; *Hulley v Cox* 1923 AD 234 246; *Sigournay v Gillbanks* 1960 2 SA 552 (A) 568-9.

[58]*Hulley v Cox* 1923 AD 234 246 `Of course, each claim must depend on its own facts, and a comparison with other cases can never be decisive, but it is instructive'.

in much the same loose manner as with awards for general damages.[59] This reflects the principle that a discretion accorded to the court should be exercised judicially and not idiosyncratically.[60]

[9.3] THEORETICAL ASPECTS

[9.3.1] Always a deduction: The adjustment for general contingencies is almost without exception a deduction.[61] There is a theorem in utility theory which states that the utility of an expected value subject to uncertainty is always less than or equal to the expected value.[62] The fact that the allowance for contingencies is so frequently a deduction is evidence of the validity of this theorem. However, if the basic inputs to the calculation by way of earnings, taxation, inflation, interest and mortality have been properly selected to evenly balance the chances of excess or understatement[63] then it is tempting to suggest that no deduction at all should be made for general contingencies.[64] Such a conclusion presupposes that all contingencies affecting earnings and living expenses have been brought into account. The majority of earnings' scenarios presume, however, that the employer will continue to prosper and that the economy will continue to thrive. Two world wars, the great depression, the collapse of communism, and the advent of AIDS[65] are reminders that wholly unpredictable cataclysmic events can supervene. It would not be unreasonable to assume that seemingly objective assessments of risk made during a time of peace are somewhat optimistic.[66] Keynes has observed that the expectations of investors are seldom borne out by unfolding reality.[67] Pearson has pointed to the `variety of

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[59]See, for instance, *Protea Assurance v Lamb* 1971 1 SA 530 (A) 535-6.

[60]*Cookson v Knowles* [1978] 2 All ER 604 (HL) 606H; Hahlo & Kahn `The SA Legal System' 215. See 38 above.

[61]See schedule in Koch `Damages' 334-8. It is arguable that upward adjustments were made in *Maasberg v Hunt Leuchars & Hepburn* 1944 WLD 2 15-16 and *Laney v Wallem* 1931 CPD 360 364 but these are notably isolated instances. In *Southern Insurance v Bailey* 1984 1 SA 98 (A) the court acknowledged the existence of substantial positive contingencies in that the earnings basis had been pitched at too low a level. This consideration notwithstanding the court increased the deduction for general contingencies from the trial court's 10% to 25%. One wonders what the deduction would have been had a more substantial earnings basis been adopted! The ½% per year formula suggests a deduction of about 30%.

[62]Pearce `Cost-Benefit Analysis' 2ed 79. See footnote 70 at 138 above.

[63]Expected values in the statistical sense.

[64]Boberg 1972 *SALJ* 147 150 `The practice of making a deduction for "contingencies"... is illogical and should be abandoned. In the absence of supporting evidence, there is no better reason for assuming that the occurrence of so-called contingencies would reduce the plaintiff's loss any more than it would increase it... In a field where nothing is known and all is surmise, it is better not to speculate at all than to speculate one-sidedly'. See too 1964 *SALJ* 194 215n24; Newdigate & Honey `The MVA Handbook' 176; Cooper-Stephenson & Saunders `Damages in Canada' 246-9; Van der Walt `Sommeskadeleer' 8; Van der Walt 1980 *THRHR* 1 22-3.

[65]The question of AIDS does not as yet seem to have received judicial consideration in relation to damages assessments.

[66]The adversary system encourages exaggeration, both up and down. Sympathy for the victim may well colour the evidence of some experts and subliminally that of a judge. A general practice of downward adjustment for contingencies ensures that the defendant is afforded some relief from such tendencies. A wealthy western economy can afford to take a more generous approach to damages awards than a less prosperous economy such as exists in South Africa.

[67]Keynes `The General Theory' 152 `This does not mean that we really believe that the existing state of affairs will continue indefinitely. We know from extensive experience that

misfortunes which can befall nations as well as individuals'.[68] These would seem to be the considerations that justify the preference for a downward adjustment for general contingencies.

In *Bailey*'s case[69] the court made the observation that not all contingencies are negative. In the circumstances of that case, **despite regard for positive contingencies**, the deduction for a child victim was increased to 25% from the 10% deducted by the trial court. The observation as regards positive contingencies was thus with a view to moderating the deduction for general contingencies having regard to the otherwise substantial future uncertainties facing a child.

[9.3.2] Utility of capital: One suspects that capital has a positive utility for many persons[70] which vastly exceeds the normal actuarial interest and mortality discounts. From the acquisition of capital flows a material upliftment of status and the provision of new opportunities to obtain and use desirable assets. This utility factor will be greatest for persons who aspire to upward social movement.[71]   There will undoubtedly be those who prefer to live their lives with a regular income untroubled by ambition or temptation to spend. The general popularity of football pools and horse-racing jackpots suggests that there is a marked preference for a large sum of immediate capital. This assertion could be measured by allowing claimants to choose between lump-sum damages and instalments and monitoring subsequent awards. Instalment payments by a quasi-government institution such as the MMF would be subject to a very low risk of default. The considerations voiced in *Rowley*'s case[72] would then be relevant. A pronounced claimant preference in favour of lump sums would justify an increase to the general contingencies applied to a lump sum over and above those applied to the instalment payments. Defendants, however, may choose to abandon this discount because of the administrative costs that attach to instalment payments.

[9.3.3] Widening funnel of doubt: It has been noted above that the usual pattern of deductions for general contingencies is described with fair accuracy by the formula ½% for each year to normal retirement.[73] Underlying this formula is the concept of a widening funnel of doubt[74] as one projects into the dim distant future. A major objection to this formulation of risk is that the deduction is applied to the total present value of future earnings or support, that is equally to notional earnings one

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this is most unlikely'.

[68]See quotation at 42.

[69]*Southern Insurance v Bailey* 1984 1 SA 98 (A) 117B `It is, however, erroneous to regard the fortunes of life as being always adverse: they may be favourable'.

[70]As compared to the utility of the equivalent income.

[71]Friedman & Savage 1948 *JPE* 279.

[72]See quotation at footnote 2.

[73]This implies a percentage deduction of 20% for a young man in his 20's, 10% for a claimant aged 45 and 0% for a claimant close to retirement age.

[74]Redington 1952 *JIA* 286 287.

year after the date of calculation as to earnings 20 years after the calculation.[75]   A seemingly preferable approach is to make the deduction separately for each future year on a sliding scale, as the actuaries do with mortality.[76]   For example for year 1 a deduction of ½% would be made; 1% for year 2; 1½% for year 3, etc; 5% for year 10; 10% for year 20; and so on. This reflects the real nature of the widening funnel of doubt. The major objection to such an approach is that its application requires a lengthy calculation. The judge cannot just make a final percentage deduction from the overall value. The approach is to be commended, however, under circumstances where the court has referred the matter back to the actuaries for purpose of recalculation.[77]

[9.3.4] *Increase to the discount rate*: The discount rate of interest comprises a basic real rate of return plus an additional return to compensate the investor for the risk attaching to the investment. For long-term fixed interest investments this has been described as the `liquidity premium'.[78]   For more complex investments one finds that the price, the value in exchange, decreases with increasing risk[79] so that a higher internal rate of return is needed if one is to reproduce the price by discounting the future cash flow.[80]   Hence one may allow for risk by increasing the discount rate of interest. The same procedure would be entirely valid for pricing damages awards. The allowance for general contingencies could be brought in by way of an addition to the discount rate of interest, perhaps +½% or +1% per year.[81]   The deduction for risk would then increase with remoteness in time giving proper effect to the widening tunnel of doubt.

I have noted[82] that the MMF uses a net capitalization rate of 4% per year but without separate allowance for mortality, as is done by actuaries. The difference between 4% per year and the 2,5% per year generally used by actuaries introduces a suitable discount for early death.[83]   The calculations by the MMF thus reproduce fairly well the results obtained by actuaries using more sophisticated techniques.

A similar effect is achieved by the English courts who use net multipliers based on a net capitalization rate of about 4,5% per year.[84]   The English net multipliers include

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[75]A further reservation is that although risk in relation to employment is generally highest during the unsettled early years the income of a young working person is generally an understatement of his career average (Kantor & Rees `SA Economic Issues' 47).

[76]See year-by-year method described at 88.

[77]See footnote 6.

[78]Pepper 1984 *TFA* 145 147.

[79]Mainly risk of fluctuations of which ruin and total loss of capital is the extreme case.

[80]Beta theory is summarized by Weston & Brigham `Managerial Finance' 247-75 312-13.

[81]In *Gillbanks v Sigournay* 1959 2 SA 11 (N) 14H counsel suggested that a discount rate of 5% per year be used and that general contingencies then be ignored. This reflected a 1% per year addition to the actuary's rate of 4% per year.

[82]See 129 and 144.

[83]But not when discounting is done over the expectation of life because that period already includes full allowance for the risk of mortality.

[84]See 144.

allowance for general contingencies and mortality. The discount for general contingencies, excluding mortality, is not introduced by way of separate deduction, as in South Africa with its gross multiplier system. The fairly high discount rate of 4,5% per year thus includes the additional discounts needed to allow for general contingencies. This rate is applied to a period which includes allowance for the risks of mortality.[85] The rate of 4,5% per year thus does not include allowance for the risk of mortality.

[9.3.5] Illustrative calculations: One way of giving effect to a widening funnel of doubt is to increase the discount rate of interest by, say, ½% per year from 2,5% per year to 3% per year. Losses one year ahead would then be discounted by 3% per year (2,5% for investment return and ½% for general contingencies). The losses for year 2 in the future would be discounted by 2,5% per year for 2 years plus a further 1% (½% per year for 2 years). The losses for year 10 in the future would be discounted by 2,5% per year for 10 years plus a further 5% (½% per year for 10 years). A loss 40 years in the future would be discounted by 2,5% per year for 40 years plus a further discount of 20% (½% per year for 40 years). Each separate year would be subject to a different percentage deduction.[86] For sake of the argument I have used simple interest. In practice compound interest would be applied so the percentages for deduction in each year would be larger than the percentages stated above.

Table 11 shows the effect in terms of a flat percentage contingency deduction of increasing the net capitalization rate.[87] Under the column `Equivalent general contingency deduction' is shown first the normal deduction according to the ½%-per-year-to-retirement formula. It is evident from the table that this level of contingency deduction is fairly accurately reproduced by increasing the net capitalization rate by 1,5% per year over and above the basic real rate of return.[88]

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[85]See *Mallett v McMonagle* [1969] 2 All ER 178 (HL) 191.

[86]See table 5 at 88.

[87]Separate allowance has been made for the contingency of early death using SALT79/81 coloured male mortality.

[88]Here taken to be 2,5% per year compound.

TABLE 11 - GENERAL CONTINGENCIES and THE DISCOUNT RATE OF INTEREST

Net Cap Rate py	Present Value R10000py	Equivalent General Contingency Deduction
	Age 55 to 65 (10 yrs)	**-5%**
1,0%	81010	+5%
2,5%	76896	0%
4,0%	73170	-5%
5,5%	69789	-9%
	Age 45 to 65 (20 yrs)	**-10%**
1,0%	147433	+12%
2,5%	132030	0%
4,0%	119200	-10%
5,5%	108437	-18%
	Age 25 to 65 (40 yrs)	**-20%**
1,0%	270601	+26%
2,5%	214520	0%
4,0%	174735	-19%
5,5%	145785	-32%

[9.3.6] Different approaches - same result: The effect of discounting at a low net capitalization rate is to introduce a positive, that is to say add-on adjustment for general contingencies. The effect of using a 1% per year net capitalization rate has been illustrated in table 11. The use of a 1% net capitalization rate coupled with a normal deduction for general contingencies has roughly the same effect as using a 2,5% per year net capitalization rate with a nil deduction for general contingencies.

[9.3.7] Share-market risk profiles: The analysis of share market returns shown in table 10A[89] indicates expected future investment returns in the long term of at least 2% per year above the prevailing dividend yield, that is to say an expectation in June 1992 of at least 5,5% per year. The figures in table 11 for a 5,5% per year net capitalization rate show the general contingency deductions which need to be made if the risk attaching to the continuing loss of earnings of R10000 per year is to be assessed as the same as that for the average investment in the share market. If one takes the view that salaries and dividends paid by a listed company are derived from the same profit source then the risk profiles of these payments should be subject to fairly similar risks. The comparison in table 11 suggests that deductions for general contingencies at ½% per year to retirement are by and large correctly assessed

[89]See at 122.

relative to the investment market's assessment of risk on listed shares. In other words the prices at which earning capacities are traded in the `forensic exchange' are being correctly assessed relative to share-market investments. This observation is, however, only valid for the very low dividend yields of about 3,5% that have prevailed since 1989.

[9.3.8] Low share prices indicate high risks: The analysis in table 10A of share-market returns shows an average real yield of 9,3% per year since 1960. Against this background an allowance for general contingencies of ½% per year to retirement, that is to say an addition of only 1,5% per year to the net capitalization rate will be unduly favourable to a claimant. It follows that when dividend yields in the share market are significantly above 3,5% then the deductions for general contingencies should, in theory, be increased above ½% per year to retirement, possibly to as high as 1% per year. This same conclusion follows from the consideration that there are bargain-price investments to be had on the stock exchange.[90] It is useful to bear in mind that when prices are low, and prospective yields are high, the market is discounting the prospect of larger-than-usual future business risks. Whether one justifies the lower awards for damages for loss of earning capacity or support by reference to investment returns or by reference to risk and general contingencies is, in the final analysis, immaterial. The end result is a price, a single once-and-for-all lump-sum amount of money.

[9.4] CONCLUSION
The deduction for general contingencies is an important component of what one may call `the forensic pricing mechanism'. Utility theory suggests that this adjustment will almost always be a deduction. In theory the adjustment for risk is best effected by increasing the discount rate of return. In practice a percentage deduction from the actuarial value generally gives much the same result.

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[90]An unusually high dividend yield on the FT-actuaries all-share index will generally indicate that share prices are unusually low.