CLAIMS RUN-OFF PATTERNS UPDATE

presented to

General Insurance Study Group

October 1993

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Summary

- 1. The run-off patterns shown in the accompanying tables all relate to claim payments for direct insurance (and facultative reinsurance) business, before allowing for reinsurance recoveries and accounted for on a one-year basis. Four sets of tables are shown for each type of business analysed; they differ only as a result of the methodology used in the analysis.
- 2. The tables update those presented to the General Insurance Study Group (GISG) in November 1992, by including data from the 1991 returns in their calculation. The methodology derives from the report of the working party on claims run-off patterns presented to GISG in October 1989, and is described in some detail later in this report (paras 28 65).

Data

- 3. All the data came from Forms 33 of the returns which have to be made to the Department of Trade and Industry (DTI) by companies authorised to write business in the UK. Forms 33 (and for 3 year business Forms 35) constitute the most comprehensive set of claims run-off data available for UK companies. We are grateful to the DTI for allowing us to use this data. An example of Form 33 appears on the next page.
- 4. Subject to certain de minimis exceptions, the direct (and facultative reinsurance) business carried on by UK authorised insurance companies must be analysed into risk groups and for each risk group the run-off of the claims must be presented in Forms 33 (or 35). A risk group comprises risks constituting part of the business carried on in any one country within any one of the 8 non-treaty DTI accounting classes, "which, in the opinion of the directors, are not significantly dissimilar either by reference to the nature of the objects exposed to such risks or by reference to the nature of the cover against such risks given by the company".
- 5. The intention was that risk groups should be relatively homogeneous so that the run-off could be expected to be reasonably stable, but the definition is broad enough to permit considerable heterogeneity. Thus run-off patterns might be expected to vary considerably between different companies and within companies from year to year.
- 6. It should be noted that from 1981 UK "home foreign" business has been treated as written in a different country from other UK business for the purpose of risk group definition. Thus for UK business currency movements should not distort the statistics. From 1981 also, private motor has had to be

Returns under Insurance Companies Legislation

General business: Analysis of claims by number and cost

Co-operative Insurance Society Limited Name of Company

31st December 1991 Financial year ended

STERLING

Currency

UNITED KINGDOM

Country

GENERAL LIABILITY Accounting class

Risk group		EMPLOYERS	ERS		Company	ď.	Pertod ended	9	Monetary		Accounting	For Official
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				F33	3615R	31	12	1981	0003	¥	,	
For direct insurance and incultative reinsurance business	Authorna e	P	acultativ		Number of ctaims	₹ā:	Amounts of payments made	909	Amounts of pay- ments made in	Estimates of payments	25 GÍ	Fotal gross amount paud and
Claims attributable	butable		month	13		1		A	or present retained to	2	mede	(2 · 3 · 4)
to year of ongin ended	rigi.	10	12	1990	-	~			claims in column 1 3	4		. 1 0
Clarine	at no c reoper	at no cost (other than reopened claims)	er then ns)	=	61	_		,	•		٠	
Closed in Francel The	at som	at some cost (other than reopened claims)	other claims)	12	148			425	88		٠	514
	recoer	reopened dalms		13	13			42	2		•	4
Claims	report	reported (other than reopened claims)	er (si	7	314			222	27		2,520	2,779
at the end of the financial year	bround reporte	incurred but not reported (IBNR)	* =	15	30						276	276
	lechen	reopened claims	2	16	12			•	•		114	114
Claims closed in previous financial years (excluding those reopened claims shown at lines 13 and 16)	ed in pre ding tho vn at line	vious fr se teop ss 13 an	nancial ened d 16)	17	2,171				446		•	446
Total claims athibulable to the year of origin (11 to 17)	s arbibul Of 11) ni	able to 1	2	19	2,749			669	564		2,910	4,173
Line 19 expressed in sleding (£000)	pessed	in sledin	(ED00)	29		. 12 14		669			2,910	

distinguished from other motor business and comprehensive private motor distinguished from non-comprehensive.

- 7. All the data analysed relates to UK business. The risk groups examined are Employers Liability (EL), Comprehensive Private Motor (Comp), Non-comprehensive Private Motor (Non-comp), and Fire. Most companies did not distinguish between Comp and Non-comp for years of origin prior to 1981, and Comp/Non-comp data were supplemented by Private Motor data for these years of origin. Although the data suggests that, from the fourth year of the run-off (i.e. omitting years 0-2), the claims run-off patterns are very similar, the run-off patterns for years 0-7 have been separately analysed.
- 8. Most of the data came from the DTI computer database rather than directly from the returns. Full data relating to payments before 1981 were not readily available; the total payments for each year of origin was available but not the split by year of payment.
- 9. The Form 33 data are gross in that they make no allowance for reinsurance recoveries (but subrogation recoveries and salvage are treated as negative claim payments). The run-off patterns shown in the tables are therefore not immediately applicable to a net (of reinsurance) run-off. In general we would expect a net run-off to be shorter than a gross run-off, partly because reinsurance recoveries relate mainly to the larger claims which may by their nature take longer to settle, and partly because of the time taken to make reinsurance recoveries.

Data discrepancies and distortions

10. Comparisons for a year of origin between box 19.3 of Form 33 (payments in previous years of the run-off) and the sum of

boxes 19.3 and 19.2 (payments in the year) in the previous year's returns revealed a number of discrepancies. These were investigated and the data adjusted as appropriate. (See section A5 of the 1989 report.) In cases where no explanation for the discrepancy was available the incremental payments figures (19.2) were used in preference to the cumulative payments (19.3).

- 11. The existence of data discrepancies should be considered before drawing conclusions about individual companies from the run-off patterns shown. The possibility of errors not signalled by data discrepancies also needs to be borne in mind.
- 12. The employers liability statistics include latent disease claims, both in the payments and outstanding (notified and IBNR) figures. There is normally no uniquely correct way of allocating such claims to a year of origin and thus some distortion of the statistics is inevitable.
- 13. Many companies discount at least part of their liability for outstanding employer liability claims. No allowance is made for this feature when calculating tail factors. Thus for those companies the claims tail is somewhat longer than shown in the tables.
- 14. The later years of run-off for the fire risk group show negative payments, believed to be mainly subrogation recoveries from liability insurers. For the most part such recoveries would appear not to be anticipated in the estimates of outstandings (presumably the result of applying prudent accounting principles), which leads to an inconsistency. Where large risks are reinsured facultatively, the same claims amount can appear in the returns of more than one company leading to double counting in the total and possible distortions.

Tail factors

- 15. Tail factors were obtained by averaging using company estimates for the three earliest years (75-77 or, for fire, 81-83). This assumes that the company estimates are correct, are not discounted (explicitly or implicitly), and make full allowance for future inflation. To the extent that these assumptions are incorrect, the tail factors are wrong.
- 16. The procedure adopted can give somewhat peculiar results when payments in the last two years of the run-off are compared with assumed payments thereafter. (Note this does not affect the motor tables.) This particularly affects the fire risk group because, as noted above, recoveries tend not to be anticipated in company estimates of outstandings.

Mean terms

- 17. Mean terms are presented as a simple method of indicating the length of a run-off pattern by a single figure and facilitating inter-company comparisons. Knowledge of mean terms enables the approximate impact of discounting, for instance, to be estimated (though, given the mean term, choice of run-off pattern can sometimes materially affect the result of discounting).
- 18. Negative claim payments can lead to peculiar mean terms. When there are negative payments, for arithmetical reasons the value of a mean term can be very sensitive to the precise run-off pattern. This explains why for the Fire risk group and for some companies very different numbers appear in different tables at the later durations.

- 19. In calculating mean terms we assumed that all payments were evenly spread throughout the year of payment. This is of course an oversimplification, and individual companies, whose own data is likely to be more detailed, can and do use other assumptions internally. For the specific purpose of inter company comparisons we do not consider that our assumption is likely to cause serious distortion.
- 20. Arbitrary assumptions were made regarding the mean terms of the tails of the run-off patterns. While curve fitting techniques could have been used, we considered that the results would have been of limited accuracy and likely to introduce spurious differences between companies.
- 21. The mean term of outstanding claims was assumed to be four years for employers liability at the end of the seventeenth year, two years for motor at the end of the fifteenth year, and two years for fire at the end of the eleventh year. The effect of alternative assumptions on the weighted mean term of the aggregate data is shown.
- 22. The weighted mean term is shown as a particular indicator of the overall mean term of a company's claims liabilities. The weights used were the proportions outstanding based on the run-off pattern, rather than the amounts outstanding at each duration. While the latter weighting is more usual, it reflects changes in the size of the account and to use it would lead to such changes distorting inter-company comparisons.

Estimation of run-off patterns

23. The problem of estimating run-off patterns from a set of run-off data mostly arises in the context of the estimation of outstanding claims or the validation of an outstanding claims

provision. Most statistical methods of estimating outstanding claims generate, implicitly or explicitly, a run-off pattern which is then assumed to apply for the purpose of estimation.

- 24. We have used four estimation methods. Three are familiar in the context of outstanding claims estimation/verification: basic chain ladder (BCL), inflation adjusted chain ladder (IACL) and an average claim method (AVC). The fourth (company incurred CI) is an ad hoc method based, inter alia, on the assumption that, at all durations, a company's outstanding claims estimate is correct and undiscounted.
- 25. The negative payments in the tail of the Fire risk group, together with the fact that estimates of outstandings are generally positive, makes the company incurred method unstable in the tail. The run-off patterns for the CI method for Fire therefore do not distinguish individual years at durations 5 and over (except for the aggregate). Mean terms would not be comparable with those calculated using the other methods. Therefore, except in the aggregate, they have not been calculated in this case.

<u>Inflation</u>

26. The index of average earnings (Department of Employment index, all employees, June value) was used in the inflation adjusted chain ladder and average claim methods for EL and motor. For the Fire risk group, the construction output index of producer prices, published in the CSO Monthly Digest of Statistics, was used. The run-off patterns shown for the IACL and AVC methods assume inflation of 8% throughout in line with our working assumption about future inflation.

27. For the IACL and AVC methods it was necessary to make an assumption about the assumptions made by companies for future inflation when setting claims reserves for their 1991 Returns. We have made the same 8% assumption as in the 1992 report which we believe to be a not unreasonable assumption.

Other Matters

27a. Insurance Company of North America which has not written Fire business since 1988 has been excluded from this year's tables. Iron Trades Mutual is now known as Iron Trades Insurance Company.

Calculation of run-off patterns

Fire: Basic Chain ladder (BCL)

- 28. The data are payments in each year 1981-91 and the company's outstanding claims estimates as at 31.12.91, for each year of origin (i.e. year of occurrence of claim) 1981-91.
- 29. Cumulative payments were calculated and from these the standard chain ladder ratios r(0),...,r(9) were formed (i.e. the link ratios were averaged, using the cumulative payments as weights). The tail factor r(u) was calculated as the arithmetic average of the following three ratios for the years of origin shown:

```
(1981) total claims (paid + outstanding) / paid claims; (1982) total claims / paid claims / r(9); (1983) total claims / paid claims / r(8).r(9).
```

30. The ratios r(0),...,r(9),r(u) then define the run-off pattern.

Fire: Inflation Adjusted Chain Ladder (IACL)

- 31. The data were the same and the method similar except that the payments were adjusted to 1991 values by multiplying by the ratio of (construction output) index values for 1991 to that for the year of payment, before calculating cumulatives.
- 32. The calculation of the tail factor r(u) was more complex and took the company's estimate to be an undiscounted money estimate. In the expressions below:

PAID is cumulative paid at 1991 values; r(8) and r(9) are as for BCL but calculated using indexed payments;

```
R(9)=1.08(r(9)-1);

R(8)=1.08^{2}(r(9)-1)r(8)+1.08(r(8)-1);

F=1.08^{2.5}.
```

F adjusts 1991 outstandings at the end of 1991 to mid 1991 values - as payment is assumed to be on average 2 years after end 1991. r(u) was estimated as 1 + the arithmetic average of the following three ratios:

```
(1981) outstandings / PAID / F;
(1982) {outstandings - PAID.R(9)} / PAID.r(9) / 1.08F;
(1983) {outstandings - PAID.R(8)} / PAID.r(8)r(9)/1.08<sup>2</sup>F.
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33. The ratios r(0),..,r(u) then define the indexed run-off pattern. As the patterns quoted were to be those appropriate to an 8% inflation assumption, the following payment ratios were used:

```
1, 1.08(r(0)-1), .., 1.08^{10}r(0)..r(8)(r(9)-1), 1.08^{12.5}r(0)..r(9)(r(u)-1).
```

Fire: Average Claim Method (AVC)

- 34. The data include also number, N = N(Y), of claims as estimated at the end of each year of origin, Y. Average payments per claim in 1991 values were calculated at each duration for each year of origin as claim payments in the year at 1991 values (calculated as in para 31) divided by N.
- 35. The arithmetic averages, A(0),...,A(10), of these quantities defined the indexed run-off pattern to year 10. A(u) was then defined as the arithmetic average of:

```
(1981) outstandings / N / F
(1982) {outstandings - 1.08A(10).N} / N / 1.08F;
(1983) {outstandings -1.08A(9).N-1.08<sup>2</sup>A(10).N} / N/1.08<sup>2</sup>F.
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36. The patterns quoted are those appropriate to 8% inflation, and so use payment ratios of A(0), 1.08A(1), .., 1.08¹⁰A(10), 1.08^{12.5}A(u).

Fire: Company Incurred Method (CI)

- 37. The data were precisely those specified in para 28. For each year of origin the payments in each year of run-off were expressed as a proportion of the total incurred claims (i.e. total payments to end 1991 plus outstandings).
- 38. This triangle of ratios r(Y,n) (Y is year of origin, n is year of run-off, Y+n<1991) was extended to complete the square n<11, working from left to right, using the formulae

$$r(Y,n)=o(Y,n-1).f(n)$$
 and $o(Y,n)=o(Y,n-1)-r(Y,n)$.

In these formulae, o(Y,n-1) is the proportion assumed outstanding for year of origin Y at the start of year n of the run-off; i.e.

$$o(Y,n-1)=1-r(Y,0)-...-r(Y,n-1).$$

- f(n) is the sum (over Y) of the given r(Y,n) divided by the sum of the corresponding o(Y,n-1).
- 39. Then the run-off pattern consists of the arithmetic averages (over Y) of r(Y,0),..., r(Y,10), o(Y,10).

Employers Liability (BCL)

- 40. The data were payments in each year 1981-91 and the company's outstanding claims estimates as at 31.12.91, for each year of origin 1975-91; and cumulative payments to the end of 1980 for the years of origin 1975-80.
- 41. The calculations were as described in para 29 except that care was needed in calculation of the r(i) owing to the missing cumulative payments. The tail factor was calculated by averaging

over the 3 years 1975-77, using r(14) and r(15) in place of r(7) and r(8).

Employers Liability (IACL)

- 42. The data were as in para 40. Paras 32 and 33 largely indicate how the calculations in para 41 were modified, but the earnings index (June value) was used in place of the construction output index. In the calculation of r(u), $F=1.08^{4.5}$.
- 43. For the purpose of indexing cumulative payments to the end of 1980, the IACL was used in reverse. The following indicates the procedure. Payments for the 1979 year of origin were assumed to be split between 1979 and 1980 in the ratio

I(79): I(80).(r(0)-1)

where I denotes the relevant index value and r(0) was derived from years of origin 1980-86. This enabled the 1979 data to be used in the calculation of r(1), r(2), etc. Similar, but more complex, formulae were used for the earlier years of origin.

Employers Liability (AVC)

- 44. The number of claims as estimated at the end of the year of origin was not part of our data for years of origin 1975-80. The data included the number of claims as estimated at the end of each year 1981-90. The number of claims as at the end of the year of origin could then be estimated for these years using chain ladder techniques in reverse (cf para 43).
- 45. The calculations were as in paras 34-36 (with obvious modifications) averaging indexed payments per claim for payments in 1981-91 for each year of run-off (1980-91 for run-off year 0).

Employers Liability (CI)

- 46. As in para 37 the ratios r(Y,n) were calculated. Initially r(Y,n) was only available for 1980 < Y + n < 1992 and (1980,0). Also, of course, o(1991-n,n) and o(1980-n,n) were available, where o(Y,n) is as in para 38 and o(Y,n) is the (assumed) proportion of payments for year Y paid by the end of run-off year n; i.e. o(Y,n)=r(Y,0)+..+r(Y,n).
- 47. The r(y,n) for Y+n>1990 were calculated as in para 38. For Y+n<1981 they were calculated, working from right to left, using the formulae r(Y,n)=c(Y,n).g(n) and c(Y,n-1)=c(Y,n)-r(Y,n). g(n) is the sum (over Y) of the given r(Y,n) divided by the sum of the corresponding c(Y,n). r(y,0) is of course c(Y,0).

Motor (5 companies)

48. For five companies separate Comp and Non-comp data was available for the years 1975-80. For these companies the methods described in paras 40-47 were used, except that in the IACL and AVC methods payments in the extreme tail were assumed to be subject to 2 years additional inflation and not 4. Proportions paid in years 15, 16 and later were aggregated after concluding the calculations. Mean terms at the start of year 15 were then taken to be 2 years for consistency with other companies.

Motor (BCL)

49. The data include payments in each year 1981-91 for each year of origin 1981-91, for Comp and Non-comp separately. For Private Motor the data are as described in para 40. The Private Motor data for years of origin 1981-91 were obtained by adding the data for Comp and Non-comp.

- 50. Chain ladder ratios r(0),...,r(6) were calculated separately for Comp and Non-comp as described in para 29.
- 51. To extend the run-off pattern to the right, ratios were derived from Private Motor data relating to payments after year 2. To this end, payments in years 0-3 were estimated for years of origin 1975-76, using BCL methods on the Private Motor data. Using these estimates we constructed a triangle of cumulative payments, excluding payments in years 0-3, with the first entry for 1975 missing.
- 52. The chain ladder factors derived from this table may be called q(4), q(5), q(6) (not used), q(7),... As q(14) and q(15) were not used, q(u) was taken as 1 + the arithmetic average of:

```
(1975) (outstandings + paid in 90-91)/(paid in 79-89)
(1976) (outstandings + paid in 1991)/(paid in 1980-90)
(1977) outstandings/(paid in 1981-91)
```

53. The q(7),...,q(13),q(u) derived from the Private Motor data were used together with r(0),...,r(6) for Comp or Non-comp to derive the payment pattern. So, except for the five companies referred to in para 48, the tail of the derived pattern has the same shape for Comp and Non-comp.

Motor (IACL)

- 54. The data were as in para 49. Payments were adjusted to 1990 values as described in paras 31 and 43, using the earnings index.
- 55. q(7), .., q(13) were derived much as described in paras 51 and 52, and formulae similar to those in para 52 were used to define q(u). The differences were that the paid amounts were

indexed to 1991 values and the outstanding amounts divided by $F=1.08^{2.5}$.

56. The indexed run-off pattern defined by r(0), .., r(6), q(7), .., q(13), q(u) was converted to one appropriate to 8% inflation in the way described in para 33. Again, except for five companies, this forces the tail to have the same shape for Comp and Noncomp.

Motor (AVC)

- 57. The data included also the number of claims as estimated at the end of the year of origin separately for Comp and Non-comp. A(0), A(1), ..., A(7) were estimated as described in paras 34 and 35, using the earnings index.
- 58. The run-off patterns were completed using the ratios q(7),..,q(u) obtained for the IACL (para 55) and the patterns quoted were those appropriate to 8% inflation. So, except for five companies, the shape of the derived tail is the same as for the IACL.

Motor (CI)

- 59. The data included the outstandings as at the end of 1991 for years of origin 1981-91, for Comp and Non-comp separately; and for years 1975-80, for Private Car.
- 60. For Comp and Non-comp separately, r(Y,n) and o(Y,n) were calculated as described in para 38 for n<8 (1980<Y<1992). The Private Car data (including Comp and Non-comp for years of origin 1981-91) was analysed as described in para 38 so as to compute the f(n) appropriate to Private Car. The f(n) so

computed were used in place of the f(n) computed from Comp or Non-comp data to calculate r(Y,n) and o(Y,n) for n>7.

61. Then the run-off pattern consists of the averages (over 1980 < Y < 1992) of r(Y,0), ..., r(Y,14), o(Y,14). Clearly the shape of the derived tail is the same for Comp and Non-comp.

Mean term

62. Mean terms were calculated from the run-off patterns assuming, in each case, that on average payments in a year were at mid-year and that the payments after the last year shown separately were 2 years (4 years for EL) after the end of that year. The mean terms shown in the tables were calculated at the beginning of each year of the run-off.

Weighted mean terms

- 63. For Fire these are weighted averages of the derived mean terms of claims outstanding at the start of years 1,2,...,11 of the run-off. The weights are the proportions outstanding at these durations according to the derived run-off pattern. Thus the weighted mean terms are unaffected by changes over time in the amount of claims payments. They are intended as a one parameter index for comparison of the overall length of the run-off of claims incurred between companies, and are not appropriate for use within a company where it would be appropriate to weight by the estimated amounts outstanding.
- 64. For EL these are weighted averages of mean terms as at the start of years 1,...,17. For motor as at the start of years 1,...,15.

Alternative assumptions for mean terms

65. For the IACL and AVC methods appropriate changes were made to the formulae to allow for these. In particular F was altered. For the BCL and CI methods these assumptions had no effect on the run-off patterns shown, though obviously the assumption about the mean term of the tail affected all the mean terms quoted.

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Index to Tables

RUN-OFF PATTERNS & MEAN TERMS

In the following tables "size" is the total of the claims payments included in the analyses, excluding payments relating to years of origin 1975-80 for the motor risk groups.

1. Fire	IACL	Run-off patterns
2.		Mean terms
3.	BCL	Run-off patterns
4.		Mean terms
5.	AV CLAIM	Run-off patterns
6.		Mean terms
7.	CO INC	Run-off patterns
8.		Aggregate data
9. EL	IACL	Run-off patterns
10.		Mean terms
11.	BCL	Run-off patterns
12.		Mean terms
13.	AV CLAIM	Run-off patterns
14.		Mean terms
15.	CO INC	Run-off patterns
16.		Mean terms
17. COMP	IACL	Run-off patterns
18.		Mean terms
19.	BCL	Run-off patterns
20.		Mean terms
21.	AV CLAIM	Run-off patterns
22.		Mean terms

23. COMP	CO INC	Run-off patterns
24.		Mean terms
25. NON-COMP	IACL	Run-off patterns
26.		Mean terms
27.	BCL	Run-off patterns
28.		Mean terms
29.	AV CLAIM	Run-off patterns
30.		Mean terms
31.	CO INC	Run-off patterns
32.		Mean terms

WEIGHTED MEAN TERMS

- 33. FIRE
- 34. EL
- 35. COMP
- 36. NON-COMP

Method : Inflation Adjusted Chain Ladder RUN-OFF PATTERN PER MILLE	6 7	8 2			2 0	2 40	4	2	ۍ ۲		2	7	1 -26		-2 0	16 7		0	_	1 0	3 -2	ი- 0	4-	3	c
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Method : Ir E	4	18	ထ	13	က	4	4	7	7	12	9	7	9	7	5	49	-	12	4	လ	-	7	=	4	4
PER MILL	ო	29	12	30	22	18	26	48	20	53	24	æ	31	45	10	66	0	23	22	24	10	19	31	16	23
PATTERN	7	88	26	108	110	11	75	138	96	80	78	2	143	129	47	202	25	106	63	72	43	83	94	43	70
RUN-OFF	-	356	351	366	333	361	348	525	327	401	357	397	450	390	316	318	336	436	383	393	217	417	343	269	700
	0	478	574	477	523	200	523	229	526	471	521	540	431	433	622	276	645	423	207	495	722	485	207	647	007
FIRE 8.00%	Size	67,314	4,841	1,054,262	76,483	78,000	1,542,471	219,378	36,732	689,523	1,249,752	39,171	150,570	21,053	202,660	738,718	194,705	304,851	118,625	242,597	32,895	576,229	2,436,369	31,179	40 456 407
Risk Group : Future Inflation :	Name	Avon	Britannic	Commercial Union	Co-operative	Cornhill	Eagle Star	Ecclesiastical	Economic	General Accident	Guardian Royal	Iron Trades Mutual	Legal & General	Minster	Municipal General	Municipal Mutual	Nat. Farmers Union Mutual	Norwich Union	Provincial	Prudential	Refuge	Royal	Sun Alliance & London	Wesleyan & General	14101

Method: Inflation Adjusted Chain Ladder

oup: FIRE RUN-OFF PAT # 8.00% RUN-OFF PAT # 0 -2 crial Union -2 0 ative -1 -2 istical 5 0 2 istical 5 0 2 istical 5 0 0 istical 5 0 0 des Mutual 0 -1 0 General -5 0 1 General -5 0 0 des Mutual -1 2 0 mers Union Mutual -1 2 0 Union -1 2 0 Union 111 -2 0 u Inion 111 -2 0 al 11 -2 0 al 11 -2 0 al 11 0 0 al 11 0 0 al<	
Inflation: 8.00% 8.00% 8.00% 4 0 0 4 0 0 7 0 0 0 7 0 0 0 7 1 0	(10+)
riflation: 8.00% 8.00% 8.00% rcial Union	9
rifation: FIR 8.00 crial Union ative ative ative ative has Mutual des Mutual des Mutual mers Union Mutual al a	7
Inflation: Inflation: Inc ercial Union arative II II Star iastical and Accident an Royal ades Mutual andes Mutual	7
Risk Group: Future Inflatii Name Avon Britannic Commercial Co-operative Cornhill Eagle Star Ecclesiastica Ecclesiastica Ecclesiastica Ecclesiastica Cornhill Eagle Star Ecclesiastica Connic Guardian Ro Iron Trades In Iron Trades In Minster Municipal Mu Nat. Farmers Norwich Unic Provincial Prudential Refuge Royal Sun Alliance Wesleyan & Cornhila Sun Alliance	TOTAL based on 1990 data

Risk Group:	FIRE				Meth	Method: Inflation Adjusted Chain Ladder	Adjusted Ch	ain Ladder
Future Inflation :	8.00%			MEAN TERMS	SMS			
Name	Ö		2	က	4	വ	9	7
Avon	1.44	1.30	2.03	2.81	3.21	3.80	3.86	4.50
Britannic	1.03	0.74	0.83	0.78	0.23	41.78	1.42	0.50
Commercial Union	1.27	76.0	1.06	1.31	1.64	3.65	11.98	11.85
Co-operative	1.18	0.93	0.93	1.25	1.54	0.92	0.81	0.75
Cornhill	1.32	1.15	1.83	2.47	2.27	2.12	1.34	0.40
Eagle Star	1.24	1.05	1.52	1.90	2.17	2.70	3.10	4.26
Ecclesiastical	2.04	1.50	2.65	4.41	6.52	6.32	5.97	5.27
Economic	1.33	1.24	1.90	3.56	4.52	4.70	5.45	5.57
General Accident	1.24	0.89	1.13	1.21	1.35	2.18	6.48	-11.00
Guardian Royal	1.20	0.97	1.34	1.82	2.38	2.17	3.34	4.22
Iron Trades Mutual	104	0.67	0.71	0.95	2.39	0.68	-2.23	-1.34
Legal & General	0.92	0.24	-1.76	10.73	3.95	2.41	1.35	0.34
Minster	1.29	0.89	0.75	0.42	-2.07	0.30	-0.23	90.9
Municipal General	96.0	0.71	0.78	0.67	-0.01	7.45	0.50	. 1.
Municipal Mutual	2.05	1.64	1.53	1.56	1.56	1.49	1.52	1.97
Nat. Farmers Union Mutual	0.87	0.54	0.16	0.76	-0.24	-1.13	12.81	7.06
Norwich Union	1.27	0.83	0.85	0.85	0.50	-0.54	-0.16	-1.24
Provincial	1.29	1.11	2.21	3.45	5.69	5.70	4.34	3.48
Prudential	1.23	0.94	1.50	2.28	3.98	4.71	5.36	5.10
Refuge	0.87	0.83	1.02	1.28	1.30	0.43	-0.83	0.50
Royal	1.09	0.65	0.30	-2.70	2.36	1.59	0.78	-0.23
Sun Alliance & London	1.27	1.06	1.34	1.73	2.17	2.44	3.24	4.57
Wesleyan & General	1.07	1.12	2.10	2.78	3.15	2.69	2.59	2.02
TOTAL	1.31	1.05	1.33	1.68	2.11	2.63	3.73	5.87
TOTAL based on 1990 data	1.30	1.02	1.42	1.82	2.28	2.93	3.98	5.57

Risk Group : Future Inflation :	FIRE 8.00%		MEAN TERMS (Contd.)	S (Contd.)
Name	8	တ	10	11+
Avon	4.13	4.48	3.48	2.00
Britannic	ł	1	ł	1
Commercial Union	24.38	3.91	2.62	2.00
Co-operative	-0.25	-1.25	3.00	2.00
Cornhill	-0.34	-1.38	3.00	2.00
Eagle Star	4.47	9.93	2.17	2.00
Ecclesiastical	4.43	3.89	2.89	2.00
Economic	5.00	4.00	3.00	2.00
General Accident	7.19	7.68	2.70	2.00
Guardian Royal	4.11	3.27	2.87	2.00
Iron Trades Mutual	1.75	4.00	3.00	2.00
Legal & General	-0.76	3.68	3.11	2.00
Minster	0.57	-0.79	-2.79	2.00
Municipal General	I	ł	;	;
Municipal Mutual	3.89	2.49	2.92	2.00
Nat. Farmers Union Mutual	5.83	4.00	3.00	2.00
Norwich Union	17.03	-3.00	3.11	2.00
Provincial	2.70	5.16	3.00	2.00
Prudential	3.83	4.00	3.00	2.00
Refuge	1	ŀ	ì	ı
Royal	5.85	3.49	2.57	2.00
Sun Alliance & London	3.08	3.41	2.66	2.00
Wesleyan & General	1.14	2.88	3.00	2.00
TOTAL	4.98	4.39	2.71	2.00
TOTAL based on 1990 data	6.16	4.11	2.00	(10+)

Risk Group :	FIRE					1	Method	Method : Basic Chain Ladder	ain Ladder
			RUN-OFF	RUN-OFF PATTERN PER MILLE	PER MIL	тí			
Name	Size		~	7	က	4	5	9	7
Avon	67,314		346	68	28	17	7	7	2
Britannic	4,841		340	23	14	ω	~	0	Τ-
Commercial Union	1,054,262		356	108	53	13	4	0	-
Co-operative	76,483		327	115	22	4	9	7	0
Cornhill	78,000		352	78	18	13	4	7	36
Eagle Star	1,542,471		340	74	25	13	9	4	-
Ecclesiastical	219,378		530	139	49	7	လ	ო	
Economic	36,732		312	88	18	7	7	ო	τ
General Accident	689,523		392	81	30	12	4	7	-2
Guardian Royal	1,249,752		350	11	23	9	∞	2	~
Iron Trades Mutual	39,171		397	58	∞	7	2	-	-
Legal & General	150,570		441	14 4	30	9	7	-	-24
Minster	21,053		375	126	45	-	-16	7	က
Municipal General	202,660	639	304	44	თ	ည	7	-5	0
Municipal Mutual	738,718		314	200	26	47	28	15	7
Nat. Farmers Union Mutual	194,705		325	27	0	-	1-	0	0
Norwich Union	304,851		429	107	22	12	S	0	ကု
Provincial	118,625		375	83	24	ιΩ	-5		2
Prudential	242,597		384	71	24	က	က	-	0
Refuge	32,895		208	46	7	_	ಬ	ო	7
Royal	576,229		409	88	19	-	7	0	ထု
Sun Alliance & London	2,436,369		333	94	30	=	7	ო	0
Wesleyan & General	31,179		263	43	15	4	7	2	Ψ-
TOTAL	10,156,137	491	356	26	32	12	7	က	0
TOTAL based on 1990 data	8,387,971		387	87	59	13	9	ಣ	-

RUN-OFF PATTERN PER MILLE (Contd.)	10 11+	-1	0 0	0 2	0 0	9 0		1 32	0 11	0 2	0 2	0 0	6 0	1 0	0 0	0 2	0 1	0 2	8 0	4	0 0	0 1	0 2	1	e 0	5 (10+)
፳	6	0	0	0	-	-18	ကု	0	0	-	0	0		0	0	d.	0	4	-5	0	0	0	0	τ-	-	-5
FIRE	ω	3	0	7	0	7	7	4	0	0	0	0	-49	4	0	0	0	7	10	7	0	0	_	ω	0	7
Risk Group :	Name	Avon	Britannic	Commercial Union	Co-operative	Cornhill	Eagle Star	Ecclesiastical	Economic	General Accident	Guardian Royal	Iron Trades Mutual	Legai & General	Minster	Municipal General	Municipal Mutual	Nat. Farmers Union Mutual	Norwich Union	Provincial	Prudential	Refuge	Royal	Sun Alliance & London	Wesleyan & General	TOTAL	TOTAL based on 1990 data

Risk Group:	FIRE						Method: B	Method : Basic Chain
				MEAN TER	MS			
Name	0	4	М	ო	4	જ	9	7
Avon	1.39	1.26	1.91	2.65	3.03	3.64	3.70	4.44
Britannic	1.02	0.75	0.87	0.79	0.30	-13.98	1.50	0.50
Commercial Union	1.25	0.97	1.03	1.24	1.46	2.95	13.61	15.56
Co-operative	1.19	0.94	0.90	1.24	1.46	0.89	0.75	0.77
Cornhill	1.31	1.15	1.81	2.49	2.31	2.09	1.35	0.42
Eagle Star	1.21	1.03	1.46	1.82	2.06	2.53	2.89	4.17
Ecclesiastical	1.98	1.42	2.45	4.07	6.30	6.15	5.87	5.25
Economic	1.28	1.22	1.76	3.41	4.24	4.44	5.30	5.54
General Accident	1.23	0.90	1.11	1.17	1.29	1.93	5.51	-9.14
Guardian Royal	1.18	96.0	1.30	1.76	2.27	2.03	3.22	4.18
Iron Trades Mutual	1.04	0.67	0.69	0.88	3.27	0.63	-1.97	-1.20
Legal & General	0.94	0.27	-1.53	12.21	4.12	2.52	1.46	0.45
Minster	1.26	0.89	0.73	0.36	-5.78	0.26	-0.12	5.76
Municipal General	0.93	0.70	0.77	0.69	0.04	9.65	0.50	# 1
Municipal Mutual	2.01	1.62	1.51	1.53	1.52	1.42	1.44	1.88
Nat. Farmers Union Mutual	0.86	0.54	0.10	1.04	90.0	-0.88	12.71	7.27
Norwich Union	1.27	0.84	0.85	0.90	0.56	-0.07	-0.14	-1.16
Provincial	1.26	1.08	2.07	3.21	5.17	5.60	4.13	3.31
Prudential	1.21	0.93	1.42	2.10	3.72	4.46	5.24	5.08
Refuge	0.87	98.0	1.02	1.31	1.40	0.54	-0.33	0.50
Royal	1.09	0.66	0.34	-2.02	2.48	1.67	0.85	-0.15
Sun Alliance & London	1.25	1.05	1.28	1.64	2.06	2.27	3.05	4.49
Wesleyan & General	1.05	1.10	2.00	2.65	3.01	2.49	2.51	1.96
TOTAL	1.28	1.04	1.28	1.60	1.99	2.42	3.49	5.89
TOTAL based on 1990 data	1.30	1.01	1.39	1.80	2.24	2.84	3.87	5.42

ıtd.)	11+	2.00	•	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	00	2.00	:	2.00	2.00	2.00	2.00	2.00		00.	2.00	00.	00.	(10+)
MEAN TERMS (Contd.)	+	2.	•	2	2.	2.	2.	2	2.	2	ζi	7	6	7	•	8	2	2	2	2	·	7	7	7	2	=
MEAN TE	5	3.43	:	2.65	3.00	3.00	2.24	2.90	3.00	2.73	2.88	3.00	3.10	-2.51	ŀ	2.93	3.00	3.09	3.00	3.00	1	2.61	2.69	3.00	2.74	2.00
	O	4.43	i	4.02	-1.25	-1.38	11.42	3.90	4.00	7.66	3.31	4.00	3.65	-0.61	ŧ	2.49	4.00	-2.84	5.12	4.00	•	3.51	3.41	2.89	4.45	3.99
FIRE	ω	4.05	ì	94.94	-0.25	-0.34	4.55	4.43	9.00	7.08	4.10	1.69	-0.59	0.53	1	3.90	5.95	12.56	2.65	3.80	i	5.94	3.04	1.09	5.07	00.9
Risk Group :	Name	Avon	Britannic	Commercial Union	Co-operative	Cornhill	Eagle Star	Ecclesiastical	Economic	General Accident	Guardian Royal	Iron Trades Mutual	Legal & General	Minster	Municipal General	Municipal Mutual	Nat. Farmers Union Mutual	Norwich Union	Provincial	Prudential	Refuge	Royal	Sun Alliance & London	Wesleyan & General	TOTAL	TOTAL based on 1990 data

Name Size Avon 67,314 Britannic 1,054,262 Co-operative 76,483 Cornhill 78,000 Eagle Star 1,542,471 Ecclesiastical 219,378 Ecclesiastical 36,732 General Accident 689,523 Guardian Royal 1,249,752 Iron Trades Mutual 39,171 Legal & General 221,053 Municipal General 738,718 Nat. Farmers Union Mutual 738,718 Provincial 738,718 Provincial 242,597 Prudential 242,597	Size 7,314 4,841 4,262 6,483 8,000					ı				
nic nercial Union berative iil Star Star siastical omic rades Mutual å General er sipal General farmers Union Mutual ich Union ncial ential	7,314 4,841 4,262 6,483 8,000		-	7 1 ENI	3	4	z,	9	7	
nic nercial Union berative iiil Star siastical omic ral Accident dian Royal rades Mutual & General er sipal General farmers Union Mutual ich Union	4,841 4,262 6,483 8,000	1	357	82	28	18	æ	8	-	
n ai ii on Mutual	4,262 6,483 8,000		355	22	9	9		0	7	
al ii on Mutual	6,483 8,000		372	111	30	13	ო	0	~	
al ii on Mutual	8,000		337	122	77	ო	9	7	0	
al ii on Mutual			357	75	15	13	ო	7	32	
ai ii on Mutual	2,471		351	73	25	13	വ	ღ		
af ii on Mutual	9,378		516	125	49	9	4	7	7	
ai ii on Mutual	6,732		342	81	19	ည	9	က	-	
ai ii on Mutual	9,523		402	79	င္က	12	4	7	-5	
n Mutual	9,752	528	357 75 22	75	22	9	7	7	-	
n Mutual	9,171		448	89	6	2	2	0	-5	
n Mutual	0,570		424	125	27	တ	-	0	-15	
n Mutual	1,053		403	128	51	12	-25	œ	က	
ion Mutual	2,660		328	26	21	7	က	4	0	
	8,718		326	200	95	47	25	15	7	
	4,705		349	22	~	-	φ	7	0	
	4,851		436	103	23	5	4	0	હ	
	8,625		388	28	25	2	-5	0	0	
	2,597		385	69	24	ស	က	4	0	
Refuge 32	2,895		217	47	6		4	7	-2	
	6,229		421	8	19	-	7-	0	9	
Sun Alliance & London 2,436	6,369		350	9	34	=	7	က	0	
Wesleyan & General 31	1,179		272	43	15	4	4	7	-	
TOTAL 10,156,137	6,137		368	26	32	12	9	က	0	
TOTAL based on 1990 data 8,387	7,971		381	82	30	12	9	က	-	

RUN-OFF PATTERN PER MILLE (Confd)	11+	13	0	ო	0	9	က	29	ω	2	2	0	_	0	0	2		2	10	4	0	*	2	~	က	
RUN-OFF P	10	-2	0	-	0	0	*	*	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	ŧ
	တ	0	0	7	*	-16	4	0	0	۳.	0	0	τ	0	0	2	0	4	-5	0	0	0	0	0	٣	•
FIRE 8.00%	80	5	0	7	0	7	7	က	0	0	0		-30	4	0	0	0	2			0	0		9	0	(
Risk Group : Future Inflation :	Name	Avon	Britannic	Commercial Union	Co-operative	Cornhill	Eagle Star	Ecclesiastical	Economic	General Accident	Guardian Royal	Iron Trades Mutual	Legal & General	Minster	Municipal General	Municipal Mutual	Nat. Farmers Union Mutual	Norwich Union	Provincial	Prudential	Refuge	Royal	Sun Alliance & London	Wesleyan & General	TOTAL	TOTAL LANGE LANGE

Risk Group:	FIRE					2	Method : Average Claim	rage Claim
Future Inflation :	8.00%			MEAN TERMS	MS			
Name	0		7	က	4	5	9	7
Avon	1.46		2.23	3.02	3.38	3.92	4.05	4.66
Britannic	1.02		0.80	0.81	0.29	-10.76	1.46	0.50
Commercial Union	1.27		1.03	1.28	1.65	4.65	12.26	9.93
Co-operative	1.21		0.87	1.23	1.58	0.92	0.82	0.70
Comhill	1.28		1.77	2.50	2.26	2.15	1.39	0.46
Eagle Star	1.22		1.45	1.80	2.06	2.66	3.22	4.50
Ecclesiastical	1.88		2.41	3.91	6.45	6.34	5.96	5.28
Economic	1.23		1.65	2.96	4.03	4.11	5.00	5.48
General Accident	1.24		1.13	1.19	1.37	2.24	6.71	-12.76
Guardian Royal	1.18		1.29	1.76	2.34	2.18	3.33	4.19
Iron Trades Mutual	1.17		0.66	0.78	0.63	-0.07	0.16	-0.74
Legal & General	1.04		-0.54	169.24	4.20	2.32	1.25	0.25
Minster	1.28		0.67	0.13	3.25	0.25	0.04	17.37
Municipal General	1.03		0.85	0.56	-0.24	4.80	0.50	i
Municipal Mutual	2.01		1.51	1.55	1.56	1.54	1.54	1.98
Nat. Farmers Union Mutual	0.88		0.03	1.34	0.22	-0.75	34.75	8.04
Norwich Union	1.25		0.80	0.73	0.21	-15.76	0.31	-0.72
Provincial	1.28		2.29	3.60	6.48	6.21	4.73	3.82
Prudential	1.19	0.91	1.38	2.00	3.62	4.47	5.26	5.08
Refuge	0.86		0.90	1.17	1.23	0.36	-1.28	0.50
Royal	1.11		0.42	-1.27	2.13	1.25	0.46	-0.54
Sun Alliance & London	1.28		1.26	1.63	2.10	2.39	3.18	4.50
Wesleyan & General	1.02		1.78	2.43	2.97	2.63	2.51	1.99
TOTAL	1.30		1.29	1.64	2.08	2.66	3.75	5.74
TOTAL based on 1990 data	1.28		1.39	1.77	2.26	2.96	4.06	5.51

(Contd.)	2.00	ŀ	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	ì	2.00	2.00	2.00	2.00	2.00	:	2.00	2.00	2.00	2.00	(10+)
MEAN TERMS (Contd.) 10	3.37	:	2.59	3.00	3.00	2.20	2.91	3.00	2.71	2.86	3.00	3.12	-2.08	;	2.92	3.00	3.10	3.00	3.00	ŀ	2.63	2.65	3.00	2.71	2.00
თ	4.37	;	4.54	-1.25	-1.47	15.12	3.91	4.00	7.30	3.29	4.00	3.66	-0.47	•	2.60	4.00	-2.61	4.84	4.00	i	3.48	3.28	2.95	4.57	4.16
FIRE 8.00% 8	3.95	ŀ	15.16	-0.25	-0.42	5.14	4.52	5.00	7.09	4.09	1.55	-0.92	0.49	1	3.85	6.36	-9.01	2.78	3.77	1	5.02	3.03	1.15	4.98	5.83
Risk Group : Future Inflation : Name	Avon	Britannic	Commercial Union	Co-operative	Cornhill	Eagle Star	Ecclesiastical	Economic	General Accident	Guardian Royal	Iron Trades Mutual	Legal & General	Minster	Municipal General	Municipal Mutual	Nat. Farmers Union Mutual	Norwich Union	Provincial	Prudential	Refuge	Royal	Sun Alliance & London	Wesleyan & General	TOTAL	TOTAL based on 1990 data

Risk Group:	FIRE					Method: Company Incurred	any Incurred
- L	! !		RUN-OFF PA	RUN-OFF PATTERN PER MILLE	MILLE		
Name	Size	0	_	2	က	4	5+
Avon	67.314	477	353	81	28	20	40
Britannic	4,841	568	345	52	12	12	9
Commercial Union	1,054,262	455	366	106	37	20	15
Co-operative	76,483	511	333	103	24	က	25
Comhill	78,000	487	369	73	19	15	37
Eagle Star	1,542,471	516	347	72	28	17	19
Ecclesiastical	219,378	286	498	122	52	ω	34
Economic	36,732	523	346	75	22	ω	23
General Accident	689,523	461	391	80	33	15	20
Guardian Royal	1,249,752	517	354	76	27	7	19
Iron Trades Mutual	39,171	447	403	96	34	-1	31
Legal & General	150,570	427	407	121	40	-7	12
Minster	21,053	424	386	115	48	4	13
Municipal General	202,660	579	327	22	25	တ	7
Municipal Mutual	738,718	290	321	190	95	47	57
Nat. Farmers Union Mutual	194,705	643	336	21	0	0	0
Norwich Union	304,851	419	416	105	24	12	23
Provincial	118,625	498	384	59	31	4	24
Prudential	242,597	502	383	89	23	9	17
Refuge	32,895	703	225	42	13	2	14
Royal	576,229	469	412	91	53	0	0
Sun Alliance & London	2,436,369	480	345	94	4	17	23
Wesleyan & General	31,179	647	273	41	8	2	15

Risk Group :	FIRE									Method	Method . Company Inclined	ייויים אמ	70
				RUN-O	FF PATT	RUN-OFF PATTERN PER MILLE	2 MILLE				B .	in and a	3
Name	Size	0	-	2	က	4	3	9	7	ဆ	o	10	11+
TOTAL	10,156,137	470	362	94	37	16	8	5	0	1	φ	က	10
1990 TOTAL	8,387,971	474	364	91	35	15	ω	လ	7	φ	-83	96	(10+)
200	Ü												
dnois yein	דואוי				0					Method	Method: Company Incurred	y Incurre	g
Name	Size	0	Ψ-	Z AN	MEAN ERMS	4	ເດ	တ	7	60	σ	ć	+ + +
											>	2	
TOTAL	10,156,137	1.41	121	1.75	2.33	3.12	4.06	5.31	6.85	6.20	5.84	2.44	2.00
1990 TOTAL	8,387,971	1.60	1.59	3.05	5.29	8.79	13.53	19.73	28.74	35.52	19.08	2.00	(10+)

Risk Group:	EMPLOYERS L	S LIABILITY	>				Method:	Method : Inflation Adjusted Chain Ladder	justed Cha	in Ladder
Future Inflation:	8.00%			RUN-OFF	RUN-OFF PATTERN PER MIL		出			
Name	Size	0	+	2	ဗ	4	5	9	7	8
•	1,404	ç	Ş	777	5	7	160	7.3	ç	26
Avon	401,1	3	o S	<u>+</u>	200	5	70	ò	2	0
Commercial Union	163,401	47	174	214	189	147	101	56	99	16
Co-operative	21,784	34	132	176	171	151	114	8	45	22
Cornhill	35,710	21	134	211	200	128	35	99	28	35
Eagle Star	590,205	19	147	183	161	124	91	09	43	28
General Accident	158,224	27	155	210	177	142	94	59	35	20
Guardian Royal	295,333	40	183	195	160	135	86	19	93	23
iron Trades Mutual	59,368	12	128	161	145	125	97	71	65	83
Iron Trades Employer	361,059	20	194	192	160	121	82	28	37	29
Legal & General	31,329	16	112	187	174	147	102	84	47	16
Norwich Union	68,138	18	114	173	185	135	86	74	44	30
Orion	9,280	÷	107	198	179	150	116	29	35	64
Pearl	8,513	5	101	205	184	190	124	49	44	32
Provincial	25,540	50	142	223	205	125	105	53	43	21
Prudential	52,436	45	130	191	202	140	86	79	44	29
Royai	82,251	24	128	146	133	102	73	20	32	18
Sun Alliance & London	182,409	4	104	156	156	128	26	29	44	25
Wesleyan & General	250	25	96	84	64	374	80	88	0	0
TOTAL	2,152,414	30	154	187	166	130	93	61	40	26
TOTAL of 1990 data	1,828,181	3	159	190	168	129	91	28	38	25

Risk Group :	EMPLOY!	LOYERS LIABILITY	LITY DIIN OFF	DATTEN		Method : Ir	nflation Adj	Method : Inflation Adjusted Chain Ladder المصافحة	n Ladder
ruure milauon . Name	9.00%	10	11	12	13	14	15	16	17+
Avon	73	0	0	0	0	0	0	0	0
Commercial Union	=======================================	ဟ	-		0	0	0	0	0
Co-operative	14	7	ĸ	9	9	17	_	-	77
Comhill	17	19	5	7	-	4	9	0	21
Eagle Star	20	13	12	13	12	13	16	23	23
General Accident	13	13	S	Ŋ	8	4	4	ထ	28
Guardian Royal	16	9	4	g	4	5	-	_	20
Iron Trades Mutual		9	84	က	က	2	0	တ	9-
Iron Trades Employer	20	16	12	9	ထ	2	7	-	7
Legal & General	22	12	æ	·-	4	ဆ	19	15	28
Norwich Union	15	10	8	က	ဖ	9	ဖ	10	69
Orion	7	₩.	2	Ψ-	7	0	0	0	0
Pearl	22	7	0	-	ဖ	ည	0	က	#
Provincial	19	O	6	7	14	-	~	0	77
Prudential	თ	21	-	-	4	-	0	ო	က
Royal	16	6	=	6	თ	42	10	16	171
Sun Alliance & London	15	တ	9	ဖ	က	4	4	9	155
Wesleyan & General	0	0	0	0	0	0	0	0	261
TOTAL	18	12	10	ω	7	6	7	o	34
TOTAL of 1990 data	17	=	တ	ω	9	∞	2	45	(16+)

Risk Group:	EMPLOYI	LOYERS LIABILITY	ITY.			Method : I	Method : Inflation Adjusted Chain Ladder	justed Cha	in Ladder
Future Inflation :	8.00%			MEAN TERMS	RMS				
Name	0	-	2	3	4	2	9	7	80
	•	7	,	c	ç		Ċ	7.	ć
Avon	60.4	4.0	_	2.03	4.43	4. 14	7.70	†	C.38
Commercial Union	3.67	2.83	2.35	2.05	1.83	1.69	1.62	1.51	1.50
Co-operative	4.70	3.85	3.38	3.15	3.09	3.25	3.65	4.42	5.21
Cornhill	4.63	3.72	3.23	3.14	3.35	3.54	3.84	4.34	4.23
Eagle Star	5.34	4.44	4.13	4.15	4.35	4.65	5.01	5.26	5.45
General Accident	4.60	3.71	3.32	3.29	3.44	3.88	4.51	5.26	5.90
Guardian Royal	4.31	3.47	3.17	3.06	3.04	3.23	3.65	4.14	4.74
Iron Trades Mutual	5.13	4.19	3.74	3.48	3.26	3.07	2.82	2.46	2.10
Iron Trades Employer	4.09	3.30	3.02	2.89	2.84	2.86	2.84	2.77	2.59
Legal & General	5.23	4.31	3.80	3.70	3.79	4.11	4.51	5.41	6.16
Norwich Union	5.67	4.77	4.33	4.28	4.66	5.15	5.81	6.74	7.49
Orion	4.46	3.50	2.87	2.55	2.28	2.03	1.77	1.26	1.13
Pearl	4.51	3.58	2.93	2.66	2.46	2.68	3.18	3.18	3.50
Provincial	4.32	3.39	2.88	2.73	2.85	2.87	3.23	3.36	3.80
Prudential	4.17	3.34	2.78	2.47	2.39	2.30	2.21	2.38	2.56
Royal	7.85	7.03	7.02	7.37	76.7	8.61	9.12	9.39	9.29
Sun Alliance & London	7.08	6.18	5.85	6.00	6.51	7.26	8.18	9.04	9.65
Wesleyan & General	8.37	7.57	7.34	7.07	6.64	12.07	11.35	14.00	13.00
TOTAL	5.00	4.14	3.82	3.81	4.00	4.36	4.85	5.33	5.74
TOTAL of 1990 data	4.95	4.09	3.79	3.81	4.04	4.46	5.01	5.51	5.93

Risk Group:	EMPLOYE	EMPLOYERS LIABILITY	<u></u>	MEAN TR	M. (Proc.) SMGET NEED	Method : Ir	ıflation Adjı	Method : Inflation Adjusted Chain Ladder	n Ladder
ruture milauon . Name	9.00%	10	=	12	13	14	15	9	17+
Avon	0.50	:	i	:	ŧ	i	;	ı	:
Commercial Union	1.27	1.18	1.68	1.77	3.38	4.72	3.32	3.38	4.00
Co-operative	5.55	5.68	5.38	4.90	4.52	4.66	5.63	4.75	4.00
Cornhill	4.75	4.83	5.52	5.83	6.04	5.16	4.77	5.00	4.00
Eagle Star	5.42	5.19	4.74	4.24	3.79	3.32	2.90	2.75	4.00
General Accident	6.20	6.32	6.65	6.26	5.87	5.10	4.57	4.02	4.00
Guardian Royal	5.25	5.84	6.23	5.91	6.01	5.80	6.10	4.73	4.00
Iron Trades Mutual	2.29	1.49	0.55	-0.11	-1.35	-3.47	-7.50	-8.50	4.00
Iron Trades Employer	2.40	2.12	1.81	1.39	0.95	0.45	-0.66	-8.30	4.00
Legal & General	5.92	6.21	6.02	5.65	4.56	3.82	3.26	3.46	4.00
Norwich Union	8.10	8.10	7.85	7.00	6.33	5.72	5.08	4.41	4.00
Orion	2.48	2.82	2.02	1.41	0.50	1	1	ı	i
Pearl	4.24	5.66	90.9	5.11	4.32	4.61	4.99	3.99	4.00
Provincial	3.89	4.28	4.27	4.43	3.66	6.35	5.72	5.00	4.00
Prudential	2.94	2.55	5.03	4.47	3.80	4.46	3.79	2.79	4.00
Royal	8.82	8.31	7.57	6.87	6.10	5.32	5.35	4.61	4.00
Sun Alliance & London	9.75	9.49	8.91	8.17	7.43	6.54	5.70	4.82	4.00
Wesleyan & General	12.00	11.00	10.00	9.00	8.00	7.00	00.9	2.00	4.00
TOTAL	5.97	5.98	5.78	5.49	5.12	4.71	4.45	4.06	4.00
TOTAL of 1990 data	6.19	6.23	00.9	5.65	5.29	4.80	4.52	4.00	(16+)

Risk Group :	EMPLOYERS LI	SLIABILITY	>	DIN OFF	DATTEDA	DIN OFF BATTERN BED MILE	ц	Method :	Method : Basic Chain Ladder	ا Ladder
Name	Size	0	-	2	3	4	ا 5	9	7	80
Avon	7.184	23	88	139	194	148	132	55	33	70
Commercial Union	163,401	36	162	208	188	151	109	62	42	17
Co-operative	21,784	32	122	170	167	151	114	87	84	23
Comhill	35,710	19	121	200	193	128	93	11	34	35
Eagle Star	590,205	17	135	172	154	122	94	65	46	32
General Accident	158,224	56	148	201	174	141	98	63	37	20
Guardian Royal	295,333	38	173	188	158	136	102	65	42	24
Iron Trades Mutual	59,368	9	118	149	138	122	98	20	89	88
Iron Trades Employer	361,059	27	178	182	154	121	87	99	40	32
Legal & General	31,329	15	107	180	166	141	108	88	20	16
Nowich Union	68,138	16	105	160	175	130	100	84	47	31
Orion	9,280	9	105	198	181	156	124	58	78	73
Pearl	8,513	14	100	195	177	196	125	55	46	32
Provincial	25,540	17	129	208	208	127	112	54	51	22
Prudential	52,436	42	123	184	199	139	103	85	48	28
Royal	82,251	22	115	133	125	66	73	51	33	18
Sun Alliance & London	182,409	13	94	146	147	125	98	20	47	25
Wesleyan & General	250	23	11	75	09	377	12	82	0	0
TOTAL	2,152,414	28	142	177	160	129	96	65	44	29
TOTAL of 1990 data	1,828,181	29	148	180	163	128	94	62	4	28

Risk Group:	EMPLOYE	OYERS LIABILITY	LITY			:	Method:	Method : Basic Chain Ladder	ո Ladder
Name	6	10	RUN-OFF	PATTEN 12	PER MILLE (Contd.)	(Contd.)	15	16	17+
Avon	96	0	0	0	0	0	0	0	0
Commercial Union	12	7	-	*	0	0	0	0	0
Co-operative	16	7	S	7	-	13	~	7	23
Cornhill	20	23	12	တ	-	4	œ	0	25
Eagle Star	21	4	5	14	14	5	19	28	26
General Accident	4	13	9	ß	2	rv	S	10	33
Guardian Royal	19	11	4	7	4	ဖ	-5	7	23
Iron Trades Mutual	7	9	107	4	4	က	0	#	-7
Iron Trades Employer	23	19	13	12	7	7	7		-
Legal & General	26	13	6	7	4	6	21	17	32
Norwich Union	18	17	7	ဖ	7	7	7	13	80
Orion	∞	-	7	τ-	7	0	0	0	0
Pearl	25	7	0	-	9	S	0	4	13
Provincial	19	-	9	-	17	γ	-	0	12
Prudential	10	25	-	_	4	-	0	4	4
Royal	17	o	13	10	10	48	12	19	193
Sun Alliance & London	16	9	9	9	က	ည	4	∞	178
Wesleyan & General	0	0	0	0	0	0	0	0	294
TOTAL	19	13	=	6	თ	10	æ		39
TOTAL of 1990 data	19	12	10	o,	7	10	7	53	(16+)

Risk Group :	EMPLOY	EMPLOYERS LIABILITY	<u>}</u>				Method: E	Method : Basic Chain Ladder	Ladder
, comply	c	•	c	MEAN TERMS	RMS	ĸ	ď	٢	α
Natio		-	7		-				
Avon	4.87	3.97	3.31	2.83	2.64	2.42	2.33	1.79	1.00
Commercial Union	3.81	2.95	2.44	2.12	1.88	1.71	1.62	1.48	1.52
Co-operative	4.88	4.03	3.53	3.30	3.21	3.36	3.69	4.48	5.25
Comhill	4.89	3.97	3.46	3.36	3.55	3.70	3.92	4.50	4.40
Eagle Star	5.66	4.74	4.42	4.42	4.57	4.81	5.14	5.37	5.53
General Accident	4.80	3.92	3.53	3.50	3.65	4.09	4.74	5.54	6.19
Guardian Royal	4.48	3.64	3.33	3.21	3.17	3.35	3.76	4.27	4.87
Iron Trades Mutual	5.41	4.46	4.00	3.71	3.47	3.26	3.00	2.60	2.24
Iron Trades Employer	4.28	3.51	3.22	3.06	2.99	2.97	2.94	2.87	2.65
Legal & General	5.44	4.52	4.01	3.91	3.97	4.22	4.64	5.50	6.20
Norwich Union	90.9	5.15	4.71	4.64	4.98	5.39	5.96	6.97	7.66
Orion	4.46	3.50	2.86	2.54	2.27	2.05	1.89	1.36	1.11
Pearl	4.62	3.68	3.04	2.75	2.52	2.77	3.22	3.29	3.66
Provincial	4.49	3.56	3.02	2.84	2.95	2.95	3.33	3.38	3.93
Prudential	4.29	3.45	2.89	2.56	2.48	2.36	2.26	2.47	2.71
Royal	8.45	7.63	7.58	7.87	8.39	8.93	9.34	9.52	9.37
Sun Alliance & London	7.59	6.68	6.32	6.46	6.92	7.61	8.45	9.27	9.83
Wesleyan & General	9.00	8.19	7.85	7.52	7.08	12.46	11.83	14.00	13.00
TOTAL	5.29	4.43	4.10	4.07	4.24	4.56	5.03	5.49	5.87
TOTAL of 1990 data	5.24	4.38	4.08	4.08	4.30	4.69	5.21	5.71	6.08

Risk Group:	EMPLOYE	EMPLOYERS LIABILITY	<u>\</u>	L F		3	Method: E	Method : Basic Chain Ladder	Ladder
Name	O	10	11	MEAN 1E 12	MEAN 1EKINS (CONIG.) 12 13	.u.) 14	15	16	17+
				,				!	1
Avon	0.30	1	:	1	;	1	:	1	:
Commercial Union	1.27	1.18	1.74	1.78	3.58	4.69	3.28	3.32	4.00
Co-operative	5.55	5.71	5.34	4.79	4.35	4.47	5.57	4.71	4.00
Comhill	4.74	4.78	5.40	5.71	5.96	5.07	4.68	5.00	4.00
Eagle Star	5.50	5.25	4.77	4.25	3.77	3.27	2.83	2.67	4.00
General Accident	6.45	6.50	6.67	6.26	5.84	5.06	4.51	3.97	4.00
Guardian Royal	5.30	5.89	6.24	5.87	5.93	5.70	6.05	4.70	4.00
Iron Trades Mutual	2.34	1.50	0.55	-0.10	-1.35	-3.51	-7.50	-8.50	4.00
Iron Trades Employer	2.45	2.16	1.83	1.39	0.93	0.40	-0.82	-10.61	4.00
Legal & General	5.90	6.24	6.07	5.65	4.59	3.82	3.23	3.43	4.00
Norwich Union	8.14	8.17	7.84	6.99	6.31	5.68	5.04	4.38	4.00
Orion	2.47	2.86	2.05	1.42	0.50	i	;	ŧ	ŀ
Pearl	4.34	5.95	6.30	5.36	4.58	4.72	4.94	3.94	4.00
Provincial	3.97	4.26	4.19	4.36	3.55	6.30	5.69	2.00	4.00
Prudential	2.95	2.60	5.25	4.64	3.93	4.39	3.70	2.70	4.00
Royal	8.87	8.32	7.55	6.86	60.9	5.29	5.33	4.59	4.00
Sun Alliance & London	9.84	9.54	8.96	8.20	7.43	6.54	5.69	4.81	4.00
Wesleyan & General	12.00	11.00	10.00	9.00	8.00	7.00	00.9	5.00	4.00
TOTAL	90.9	6.03	5.79	5.48	5.09	4.66	4.39	4.02	4.00
TOTAL of 1990 data	6.29	6.29	6.02	5.65	5.27	4.76	4.50	4.00	(16+)

Risk Group:	EMPLOYERS LIA	S LIABILITY	≽					Method: /	Method: Average Claim	mir.
Future Inflation:	8.00%			RUN-OFF	RUN-OFF PATTERN PER MILLE	PER MILL	щ			
Name	Size	0	-	2	8	4	5	9	7	8
Avon	7,184	22	107	150	197	135	186	61	56	59
Commercial Union	163 401	4	150	201	189	155	113	65	42	19
Co-operative	21.784	35	123	172	166	149	121	87	42	50
Cornhill	35,710	22	139	213	199	126	91	29	30	33
Eagle Star	590,205	18	138	176	159	124	94	64	47	31
General Accident	158,224	27	157	216	184	145	91	59	34	19
Guardian Royal	295,333	40	188	203	164	134	26	58	æ	23
Iron Trades Mutual	59,368	12	104	142	132	118	104	87	72	95
Iron Trades Employer	361,059	52	183	186	157	123	87	09	40	32
Legal & General	31,329	15	113	186	175	147	105	82	45	15
Norwich Union	68,138	17	1 7	170	187	138	66	77	45	30
Orion	9,280	11	113	182	150	118	35	62	500	52
Pearl	8,513	15	118	205	184	195	123	46	33	56
Provincial	25,540	17	133	215	207	134	109	55	47	23
Prudential	52,436	47	139	201	199	140	93	75	40	29
Royai	82,251	56	126	145	134	102	72	20	32	17
Sun Alliance & London	182,409	17	123	176	167	132	5	29	41	21
Wesleyan & General	250	19	108	119	78	446	თ	68	0	0
TOTAL	2,152,414	28	150	185	166	131	94	63	42	28
TOTAL of 1990 data	1,828,181	59	154	189	168	131	93	09	40	56

Risk Group :	EMPLOYERS		.IABILITY				Method : A	Method : Average Claim	aim
Future Inflation : Name	8.00% 9	10	RUN-OFF 11	PATTEN 12	PER MILLE 13	(Contd.) 14	15	16	17+
	ri Ci	ć							
	S	>	>	>	0	0	0	0	0
Commercial Union	14	œ			0	0	0	o	c
Co-operative	12	ထ	9	_	7-	12	· 	· ~-	, c
Cornhill	19	20	7	. ∞	; 	i e	- ແ	- c	4 6
Eagle Star	21	13	12	13	. 2	13	71	25	55 27
General Accident	13	7	4	4	4	٣	ď	U	č
Guardian Royal	15	ූ	∙ 4	- ເ ດ	- c	> <	o ₹	,	- 7
Iron Trades Mutual	22	^	. 98	, 4	4	ts	7 -	- 6	<u> </u>
Iron Trades Employer	23	17	- + 1	. ‡	σ	ר ע	> r	۰, ق	7 -
Legal & General	24	12	! œ	7	o ro	ာထာ	7 18	- દ	27
Norwich Union	15	11	2	ĸ	ď	Œ	ιτ	Ç	Ö
Orion	ო	0	· 	· c	۰ ،) C	, c	2 c	g c
Pearl	19	ယ	. 0	•	1 ((> 4	> c	> c	o d
Provincial	17	တ	ω	. ~) <u>(</u>	t -	> ~	v C	e
Prudential	ω	19	-	-	? ? m	- 0	- 0	9 0	2 ო
Royal	17	O	1-	o	σ	42	7	ā	173
Sun Alliance & London	12	7	4	4	2	! 00	I er	ی ت	
Wesleyan & General	0	0	0	0	0	0	0	00	153
TOTAL	18	12	10	æ	7	α	1	d	22
TOTAL of 1990 data	17	7	∞	ω	တ	, ω	- 9	45	(16+)

Risk Group :	EMPLOYI	ERS LIABIL	<u>}</u> [Method:	Method: Average Claim	aim
Future Inflation:	8.00%	%0		MEAN TERMS	RMS			•	
Name	0	-	2	က	4	5	9	7	8
Avon	4.50	3.59	2.97	2.48	2.23	1.83	2.05	1.71	0.99
Commercial Union	3.88	3.03	2.50	2.16	1.90	1.73	1.65	1.53	1.50
Co-operative	4.92	4.06	3.58	3.36	3.30	3.47	3.99	5.03	5.82
Cornhill	4.52	3.61	3.13	3.02	3.19	3.32	3.53	3.95	3.85
Eagle Star	5.46	4.55	4.21	4.19	4.34	4.57	4.89	5.12	5.33
General Accident	4.38	3.48	3.06	2.99	3.09	3.48	4.00	4.72	5.37
Guardian Royal	4.16	3.31	3.00	2.89	2.86	3.05	3.42	3.88	4.49
Iron Trades Mutual	5.49	4.55	4.02	3.70	3.39	3.08	2.77	2.43	2.04
Iron Trades Employer	4.22	3.43	3.12	2.97	2.88	2.86	2.82	2.75	2.54
Legal & General	5.18	4.26	3.74	3.62	3.69	3.98	4.38	5.28	5.96
Norwich Union	5.68	4.77	4.33	4.26	4.63	5.16	5.83	69.9	7.43
Orion	4.71	3.76	3.18	2.88	2.54	2.11	1.56	0.80	0.80
Pearl	4.34	3.40	2.79	2.51	2.28	2.51	3.06	3.11	3.47
Provincial	4.36	3.42	2.88	2.69	2.74	2.76	3.09	3.17	3.69
Prudential	4.05	3.22	2.69	2.40	2.32	2.24	2.13	2.28	2.36
Royal	7.89	7.09	7.06	7.42	8.04	8.68	9.17	9.42	9.32
Sun Alliance & London	6.19	5.29	4.98	5.13	5.62	6.38	7.44	8.58	9.48
Wesleyan & General	6.45	5.56	5.19	4.92	4.44	11.09	10.52	14.00	13.00
TOTAL	5.03	4.16	3.83	3.80	3.96	4.29	4.75	5.23	5.65
TOTAL of 1990 data	4.98	4.12	3.80	3.79	4.00	4.38	4.92	5.43	5.88

Risk Group:	EMPLOYE	EMPLOYERS LIABILITY	<u>\</u>	AAC AM TO		S	Method: A	Method : Average Claim	aim
ruture initiation : Name	9.00%	10	17	12	12 13	14	15	16	17+
QVQ	0.50	:	;	;	į	1	:	;	ŀ
Commercial Union	1.25	1.19	1.80	1.77	3.96	4.71	3.34	3.36	4.00
Co-operative	6.05	5.92	5.59	5.13	4.77	4.86	5.66	4.78	4.00
Comhill	4.12	4.22	4.92	5.39	5.95	5.08	4.70	2.00	4.00
Eagle Star	5.35	5.15	4.70	4.19	3.73	3.25	2.81	2.63	4.00
General Accident	5.80	6.11	6.54	6.21	5.83	5.05	4.50	3.95	4.00
Guardian Royal	5.10	5.76	6.27	6.02	6.26	9.00	6.18	4.73	4.00
Iron Trades Mutual	2.12	1.44	0.51	-0.46	-1.72	-3.61	-7.50	-8.50	4.00
Iron Trades Employer	2.35	2.10	1.79	1.37	0.92	0.43	-0.74	-8.41	4.00
Legal & General	5.69	6.12	5.98	5.65	4.54	3.82	3.28	3.50	4.00
Norwich Union	8.05	8.07	7.88	7.02	6.33	5.72	5.09	4.41	4.00
Orion	2.16	2.66	1.88	1.31	0.50	ı	1	1	1
Pearl	4.10	5.51	5.97	5.02	4.23	4.64	5.16	4.16	4.00
Provincial	3.89	4.26	4.20	4.39	3.67	6.38	5.73	5.00	4.00
Prudential	2.80	2.44	4.86	4.40	3.78	4.64	3.99	2.99	4.00
Royal	8.84	8.34	7.59	6.89	6.11	5.32	5.34	4.61	4.00
Sun Alliance & London	9.67	9.43	8.91	8.16	7.41	6.53	5.69	4.81	4.00
Wesleyan & General	12.00	11.00	10.00	9.00	8.00	7.00	00.9	9.00	4.00
TOTAL	5.91	5.95	5.76	5.47	5.10	4.69	4.41	4.02	4.00
TOTAL of 1990 data	6.17	6.23	6.01	5.65	5.28	4.78	4.50	4.00	(16+)

Risk Group :	EMPLOYERS LI	S LIABILITY	≽	RUN-OFF	: PATTERN	RUN-OFF PATTERN PFR MILLE	ш	Method:	Method : Company Incurred	ncurred
Name	Size	0	-	2	3	4	5	9	7	8
Avon	7 184	28	124	173	183	127	147	74	œ	7.
		} ;	- 1				- (- (3 :	- 6
Commercial Union	163,401	42	155	194	181	151	112	/9	46	22
Co-operative	21,784	30	117	155	155	145	120	91	9	29
Comhill	35,710	18	119	181	176	115	91	62	27	40
Eagle Star	590,205	8	140	177	159	124	94	65	48	32
General Accident	158,224	24	142	195	172	150	101	29	40	24
Guardian Royal	295,333	38	178	193	160	136	102	64	43	26
Iron Trades Mutual	59,368	4	114	147	130	107	87	20	53	71
Iron Trades Employer	361,059	55	185	182	153	121	88	63	42	32
Legal & General	31,329	15	107	182	169	149	113	88	20	20
Norwich Union	68,138	91	108	171	181	136	86	75	47	33
Orion	9,280	5	125	197	169	138	66	88	108	46
Pearl	8,513	7	83	189	176	194	130	20	43	30
Provincial	25,540	16	130	201	186	127	114	9	54	29
Prudential	52,436	43	127	184	191	143	96	80	47	36
Royal	82,251	24	121	140	129	109	81	56	36	19
Sun Alliance & London	182,409	4	103	152	152	129	66	69	46	26
Wesleyan & General	250	61	193	174	85	342	20	73	0	0
TOTAL	2,152,414	27	144	177	161	130	96	99	45	30
TOTAL of 1990 data	1,828,181	28	147	180	162	128	83	63	43	29

Risk Group :	EMPLOYE	ERS LIABILITY	JTY	-		: :	Method : C	Method : Company Incurred	curred
Name	တ	9	RUN-OFF	PATTEN F	PER MILLE 13	. (Contd.) 14	15	16	17+
Avon	37	0	0	က	က	က	က	ო	က
Commercial Union	16	œ	7	7	0	0		0	-
Co-operative	17	4	တ	6	7	7	က	9	18
Combill	20	21	9	9	က	13	30	0	69
Eagle Star	22	14	13	14	12	-	13	17	28
General Accident	16	15	ĸ	9	2	4	က	ည	30
Guardian Roval	18	9	S	9	က	က	ကု	7	17
Iron Trades Mutual	17	œ	153	9	œ	ß	0	ဖ	0
Iron Trades Employer	21	16	12	12	ග	9	က		0
Legal & General	31	14	10	7	4	φ	12	9	24
Norwich Union	16	7	2	ស	9	9	2	10	73
Orion	7		က		တ	0	0	0	0
Pearl	33	12	0	က	7	7	0	7	15
Provincial	24	12	7	က	19	-	-	0	12
Prudential	တ	23	7		2	τ-	0	ო	9
Royal	19	5	12	Ø	6	37	Ø	18	161
Sun Alliance & London	16	O	9	ဖ	က	4	4	9	157
Wesleyan & General	0	0	0	0	0	0	0	23	23
TOTAL	20	13	7	O	æ	6	7	თ	38
TOTAL of 1990 data	20	13	9	6	7	6	ဖ	54	(16+)

Risk Group :	EMPLOYE	PLOYERS LIABILITY	ΣĽ				Method: (Method : Company Incurred	curred
				MEAN TERMS	RMS				
Name	0	-	2	8	4	5	9	7	8
Avon	4.48	3.59	3.05	2.70	2.52	2.23	2.39	2.36	2.03
Commercial Union		3.10	2.61	2.28	2.03	1.86	1.79	1.67	1.73
Co-operative	5.07	4.21	3.72	3.44	3.28	3.29	3.51	3.98	4.63
Cornhill	5.94	5.04	4.67	4.78	5.27	5.68	6.24	6.75	6.54
Eagle Star	5.40	4.49	4.16	4.13	4.27	4.49	4.80	5.04	5.30
General Accident	4.75	3.85	3.42	3.32	3.36	3.70	4.20	4.88	5.49
Guardian Royal	4.29	3.44	3.10	2.95	2.86	2.95	3.24	3.58	4.09
Iron Trades Mutual	5.82	4.90	4.48	4.28	4.11	3.90	3.64	3.30	2.84
Iron Trades Employer	4.25	3.47	3.19	3.03	2.95	2.92	2.87	2.83	2.69
Legal & General	5.11	4.18	3.62	3.44	3.38	3.52	3.81	4.46	5.05
Norwich Union	5.80	4.89	4.44	4.39	4.74	5.22	5.83	69.9	7.45
Orion	4.41	3.46	2.89	2.60	2.31	2.01	1.59	1.15	1.25
Pearl	4.82	3.88	3.21	2.94	2.75	3.05	3.64	3.63	3.80
Provincial	4.66	3.73	3.22	3.06	3.08	3.04	3.31	3.33	3.68
Prudential	4.33	3.51	2.97	2.67	2.58	2.54	2.46	2.63	2.77
Royal	7.74	6.92	6.83	7.07	7.52	8.13	8.70	90.6	9.08
Sun Alliance & London	7.15	6.24	5.91	6.03	6.49	7.20	8.10	8.96	9.59
Wesleyan & General	4.06	3.29	3.01	2.78	2.21	5.43	5.26	11.75	10.75
TOTAL	5.23	4.36	4.03	3.99	4.13	4.44	4.86	5.30	5.72
TOTAL of 1990 data	5.26	4.40	4.10	4.10	4.30	4.67	5.15	5.62	6.02

Risk Group :	EMPLOY	EMPLOYERS LIABILITY	Σ <u>I</u>		:	;	Method: (Method: Company Incurred	curred
Name	6	10	11	MEAN TE 12	MEAN TERMS (Contd.) 12 13	(d.) 14	15	16	17+
•	!		•						
Avon	2.47	5.58	4.58	3.58	3.20	2.88	2.67	2.75	4.00
Commercial Union	1.61	1.85	2.81	2.93	4.88	4.53	3.17	3.50	4.00
Co-operative	4.85	4.77	4.65	4.29	3.99	4.02	4.40	3.87	4.00
Cornhill	6.97	6.82	6.84	6.34	5.64	4.77	4.34	5.00	4.00
Eagle Star	5.37	5.25	4.88	4.48	4.15	3.79	3.45	3.31	4.00
General Accident	5.91	6.22	6.85	6.55	6.22	5.46	4.96	4.40	4.00
Guardian Royal	4.66	5.38	5.95	5.86	6.39	6.34	6.61	4.57	4.00
Iron Trades Mutual	2.64	1.84	0.89	1.98	1.71	1.66	1.50	0.50	!
Iron Trades Employer	2.55	2.27	1.90	1.43	0.99	0.39	-1.52	0.80	-0.31
Legal & General	4.91	5.74	5.98	90.9	4.91	4.28	3.79	4.05	4.00
Norwich Union	8.14	8.16	7.95	7.10	6.42	5.80	5.18	4.47	4.00
Orion	2.32	2.62	1.82	1,37	0.50	ł	1	1	ł
Pearl	3.96	5.11	5.44	4.49	3.76	4.64	5.44	4.44	4.00
Provincial	3.76	4.06	3.97	4.03	3.35	6.17	5.52	5.00	4.00
Prudential	3.38	3.02	5.17	4.75	4.14	5.16	4.50	3.50	4.00
Royal	8.66	8.23	7.52	6.87	6.12	5.34	5.30	4.54	4.00
Sun Alliance & London	9.72	9.48	8.91	8.18	7.45	6.57	5.73	4.85	4.00
Wesleyan & General	9.75	8.75	7.75	6.75	5.75	4.75	3.75	2.75	4.00
TOTAL	5.97	5.99	5.81	5.55	5.21	4.81	4.56	4.15	4.00
TOTAL of 1990 data	6.27	6.32	6.11	5.77	5.40	4.90	4.57	4.00	(16+)

Risk Group :	MOTOR - COMPREHENSIVE	MPREHEI	NSIVE	BI IN OFF	M A HIN GEO NATTERNI GEO NI IS		Method : Ir =	ıflation Adj	Method : Inflation Adjusted Chain Ladder =	Ladder
Name	Size	0	-	2	3	4	ro I	9	7	ထ
Avon	94,483	632	235	37	33	22	24	9	4	2
Britannic	23,622	615	221	40	35	27	=	24	15	S
Commercial Union	524,734	646	227	37	28	25	17	7	7	-
Co-operative	638,965	615	218	36	32	28	21	21	16	4
Comhill	454,893	618	229	44	35	22	26	12	ω	-
Eagle Star *	798,671	620	241	40	33	23	17	5	9	4
General Accident	1,261,494	617	241	36	9	23	19	17	5	7
Guardian Royal	1,032,911	618	247	43	34	24	18	9	လ	τ-
Iron Trades Mutual *	266,398	638	224	33	53	70	17	7	13	80
Legal & General	141,921	579	245	35	30	24	31	14	36	2
London & Edinburgh	225,137	585	240	48	42	2	77	30	బ	2
Nat. Farmers Union Mut.		607	222	39	33	30	92	17	15	2
Nat.Insurance & G'tee	358,044	615	248	37	29	27	74	7	5	1
Norman *	56,479	636	225	44	40	24	14	9	က	9
Norwich Union *	1,056,922	287	268	39	34	56	16	11	7	4
Pearl	90'080	569	253	52	44	44	29	ထ	-	0
Provincial	330,901	617	236	38	33	24	18	15	15	က
Prudential	462,300	979	230	38	29	22	20	13	16	7
Royal *	852,520	615	236	41	33	56	16	13	9	9
Sun Alliance & London	1,157,936	625	238	39	32	21	15	16	10	-
Wesleyan & General	15,090	555	194	33	37	36	55	92	ω	0
TOTAL	10,095,171	617	240	39	32	24	19	14	7	7
TOTAL of 1990 data	8,354,141	620	242	39	32	54	19	7	4	က
		* For these	e compan	ies separafe	Comp data	were avai	lable			

* For these companies separate Comp data were available

Mut. 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Future Inflation:	8.00%		KON-OFF F	PATTERNP	PER MILLE ((Contd.)	
to are a control of the control of t		6	9	=	12		4	15+
rcial Union 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Avon	0	0	0	0	0	0	0
reial Union 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Britannic	7	4	γ	0	0	0	0
tarive 2 1 1 3 2 1 far* Accident 2 2 1 0 0 0 0 Accident 2 1 1 0 0 0 0 Accident 2 2 1 0 0 0 0 General 1 2 0 0 0 0 0 0 * Edinburgh 2 2 0 0 0 0 0 0 * Trance & Gitee 0 0 0 0 0 0 0 Irrance & Gitee 0 0 0 0 0 0 0 0 all 0 0 0 0 0 0 0 0 0 all 1 2 1 0 0 0 0 0 0 all 0 0 0 0 0 0 0 0 all 0 0 0 0 0 0 0 0 all 0 0 0 0 0 0 0 0 ance & London 0 0 0 0 0 0 0 an & General 1 0 4 0 0 0 0 all 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 all 1 1 1 1 0 0 0 0 all 1 1 1 1 0 0 0 0 all 1 1 1 1 0 0 0 0 all 1 1 1 1 0 0 0 0 all 1 1 1 1 0 0 0 0 all 1 1 1 1 1 0 0 0 0 all 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Commercial Union	0	0	0	0	0	0	0
tar* Accident 2 2 1 0 0 0 0 Accident 2 1 1 1 0 0 0 0 Accident 2 1 1 1 0 0 0 0 Accident 2 1 1 1 0 0 0 0 Accident 2 1 1 1 0 0 0 0 Accident 2 2 0 0 0 0 0 0 * Edinburgh 2 2 0 0 0 0 0 0 * Trance & G'tee 0 0 0 0 0 0 0 0 * Irance & G'tee 0 0 0 0 0 0 0 0 * Irance & C'tee 0 0 0 0 0 0 0 0 all 0 0 0 0 0 0 0 0 0 0 all 1 2 1 0 0 0 0 0 0 0 ance & London 0 0 0 0 0 0 0 0 an & General 1 0 4 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 0 0 0 an & General 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Co-operative	7	4	₩-	က	7		-
Accident 2 2 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Comhill	-	7	0	0	0	0	
Accident 2 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Eagle Star *	7	7	-	0	0	0	0
n Royal 0 0 0 0 0 0 des Mutual* 3 3 4 1 0 0 General 1 2 0 0 0 0 0 a Edinburgh 2 2 0 0 0 0 0 mers Union Mut. 1 0 0 0 0 0 0 irance & Gitee 0 0 0 0 0 0 0 Union* 2 5 1 0 0 0 0 all 2 5 1 0 0 0 0 and & General 1 2 1 0 0 0 0 and & General 1 1 0 0 0 0 0 and & General 1 1 0 0 0 0 0 and & General 1 1 0	General Accident	7		4-	0	0	0	0
des Mutual* 3 3 4 1 0 0 0 General 1 2 0 0 0 0 0 & Edinburgh 2 2 0 0 0 0 0 * mers Union Mut. 1 0 0 0 0 0 0 * urance & G'tee 0 0 0 0 0 0 0 * Union* 2 5 1 0 0 0 0 all 0 0 1 0 0 0 0 0 and 2 0 0 0 0 0 0 0 and 2 0 0 0 0 0 0 0 and 3 1 0 0 0 0 0 0 0 and 4 0 0 0 0 0 fragalalalalalalalalalalalalalalalalalala	Guardian Royal	0	0	0	0	0	0	0
General 1 2 0 0 0 0 & Edinburgh 2 2 0 0 0 0 mers Union Mut. 1 0 0 0 0 0 rrance & G'tee 0 0 0 0 0 0 rrance & G'tee 0 0 0 0 0 0 urance & G'tee 0 0 0 0 0 0 0 urance & Lordon	Iron Trades Mutual *	က	ღ	4	-	0	0	0
& Edinburgh 2 2 0 <td< td=""><td>Legal & General</td><td>~</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>7</td></td<>	Legal & General	~	0	0	0	0	0	7
mers Union Mut. 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	London & Edinburgh	8	8	0	0	0	0	0
### ##################################	Nat. Farmers Union Mut.	-	0	0	0	0	0	0
Union* 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nat.Insurance & G'tee	0	0	0	0	0	٥	0
Union* 2 5 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Norman *	7	0	0	0	0	0	0
al 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Norwich Union *	2	Ŋ	-	0	0	0	0
and all 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pearl	٥	0	0	0	0	0	0
ance & London 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Provincial	٥	-	0	0	0	0	0
ance & London 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Prudential	-	8		0	0	0	0
ance & London 0 0 0 0 0 0 0 0 and & Ceneral 1 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Royal *	7	0	0	-	0	0	
1 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sun Alliance & London	0	0	0	0	0	0	0
1 1 0 0 0 0	Wesleyan & General		0	4	0	0	0	0
	TOTAL	-	-	0	0	0	0	0
- · ·	TOTAL of 1990 data	₹~		-	0	0	T	(14+)

Risk Group:	MOTOR - C	COMPREHENSIVE	NSIVE			Method: In	Method: Inflation Adjusted Chain Ladder	sted Chain L	adder
Future Inflation:	8.00%			MEAN TERMS	MS				
Name	0	-	2	ဗ	4	5	9	7	8
Avon	1.22	1.47	2.18	1.83	1.54	1.12	1.06	0.95	0.73
Britannic	1.43	1.91	2.81	2.57	2.38	2.19	1.55	1.45	1.66
Commercial Union	1.20	1.47	2.22	1.93	1.60	1.35	1.07	0.80	1.56
Co-operative	1.49	2.06	3.08	2.80	2.53	2.32	2.09	2.19	3.06
Comhill	1.32	1.66	2.40	2.16	1.95	1.59	1.69	1.72	2.72
Eagle Star *	1.29	1.58	2.45	2.24	2.10	1.96	1.94	1.84	1.74
General Accident	1.32	1.65	2.61	2.33	2.06	1.73	1.42	1.39	1.92
Guardian Royal	1.23	1.40	2.04	1.76	1.50	1.20	1.02	0.85	1.18
Iron Trades Mutual *	1.35	1.86	3.07	2.88	2.78	2.61	2.50	1.97	1.95
Legal & General	1.57	2.03	3.16	2.82	2.44	1.97	1.76	1.15	3.38
London & Edinburgh	1.44	1.76	2.49	2.23	2.09	1.59	.1.	1.43	1.68
Nat. Farmers Union Mut.	1.41	1.82	2.54	2.14	1.84	1.49	1.21	0.84	1.09
Nat.Insurance & G'tee	1.27	1.50	2.32	2.00	1.63	1.34	1.10	0.70	0.95
Norman *	1.22	1.48	2.07	1.79	1.73	1.69	1.69	1.37	0.71
Norwich Union *	1.36	1.57	2.56	2.32	2.18	2.12	2.00	1.86	1.72
Pearl	1.37	1.51	1.95	1.55	<u>+</u>	0.80	0.73	1.48	1.71
Provincial	1.33	1.66	2.53	2.24	1.99	1.66	1.29	0.91	1.25
Prudential	1.32	1.71	2.64	2.42	2.16	1.82	1.58	1.20	1.97
Royal *	1.35	1.71	2.62	2.41	2.23	2.13	1.90	1.81	2.01
Sun Alliance & London	1.27	1.55	2.37	2.13	1.92	1.60	1.19	1.03	2.14
Wesieyan & General	1.87	2.57	3.16	2.56	1.99	1.36	0.88	1.98	2.89
TOTAL	1.30	1.60	2.45	2.18	1.93	1.64	1.40	1.26	2.15
TOTAL of 1990 data	1.29	1.57	2.44	2.18	1.97	1.78	1.74	2.23	2.33
		* For these	companies	For these companies separate Comp data were available	mp data w	ere available			

Risk Group :	MOTOR - (- COMPREHENSIVE	NSIVE			Method : Int	Method: Inflation Adjusted Chain Ladder
Future Inflation :	8.00%	ć	7	MEAN TER	MEAN TERMS (contd.)	7 7	46.
Assis	9 72	2 0	-	7	2	<u> </u>	+01
	2	2	•	ł	!	;	ł
Britannic	1.38	0.78	0.50	:	;	1	:
Commercial Union	1.87	2.06	1.99	2.06	6.95	5.95	2.00
Co-operative	3.11	2.94	2.46	1.66	1.72	2.07	2.00
Comhill	2.61	2.11	4.74	4.72	3.92	3.00	2.00
Eagle Star *	1.59	1.07	0.97	0.93	0.87	0.50	i
General Accident	1.87	1.84	1.63	2.61	3.90	3.00	2.00
Guardian Royal	1.33	1.06	0.91	1.31	0.50	:	:
Iron Trades Mutual *	1.94	1.36	0.85	0.74	2.30	3.00	2.00
Legal & General	3.69	3.29	5.86	5.31	4.33	3.00	2.00
London & Edinburgh	1.23	96.0	1.42	1.50	0.50	ŀ	į
Nat. Farmers Union Mut.	0.92	1.44	0.81	5.00	4.00	3.00	2.00
Nat.Insurance & G'tee	0.98	0.71	0.19	0.50	ì	i	ł
Norman *	0.50	i	ı	ì	:	:	ı
Norwich Union *	1.41	0.68	0.36	2.11	1.11	0.50	i
Pearl	0.86	0.84	0.50	ł	ŀ	ı	1
Provincial	1.50	0.82	1.58	2.28	4.00	3.00	2.00
Prudential	1.59	0.99	0.88	1.30	0.50	:	ž
Royal *	2.98	3.90	3.16	2.83	3.20	3.00	2.00
Sun Alliance & London	2.94	2.88	3.50	3.03	2.00	1.80	2.00
Wesleyan & General	1.96	1.47	0.50	ž	i	ŀ	1
TOTAL	2.26	2.14	2.41	2.50	2.60	2.57	2.00
TOTAL of 1990 data	2.47	2.42	2.69	2.66	2.47	2.00	(14+)
		* For these	companie	* For these companies separate Comp data were available	omp data we	re available	

Risk Group:	MOTOR - COMPREHENSIVE	MPREHER	ISIVE					Method : E	Method: Basic Chain Ladder	Ladder
•				RUN-OFF	PATTERN	RUN-OFF PATTERN PER MILLE				
Name	Size	0	₩-	7	က	4	2	9	7	8
Avon	94,483	629	235	38	33	23	25	10	4	2
Britannic	23,622	614	219	42	34	5 8	7	5 4	16	9
Commercial Union	524,734	644	229	38	29	24	16		ထ	7
Co-operative	638,965	614	218	36	31	28	21	21	16	4
Cornhill	454,893	616	228	45	36	22	5 6	12	თ	7
Eagle Star *	798,671	613	243	40	33	24	19	=	7	4
General Accident	1,261,494	613	243	36	99	24	19	17	Ę	က
Guardian Royal	1,032,911	612	250	43	34	22	19	9	ည	_
Iron Trades Mutual *	266,398	643	216	32	28	20	17	æ	14	6
Legal & General	141,921	979	243	34	30	24	29	14	38	ဇ
London & Edinburgh	225,137	586	238	50	42	21	21	28	æ	2
Nat. Farmers Union Mut.		605	222	40	3 0	30	5 6	17	15	ო
Nat.Insurance & G'tee		614	248	37	58	27	24	12	5	***
Norman *	56,479	639	222	44	40	24	13	ဖ	ო	9
Nowich Union *	1,056,922	584	265	39	34	26	17	12	ω	5
Pearl	90,050	566	258	20	45	45	27	o	- Quantity	0
Provincial	330,901	614	236	38	32	24	19	र ी	16	4
Prudential	462,300	625	228	38	တ္ထ	77	20	7	15	2
Royal *	852,520	609	236	4	33	26	17	14	12	7
Sun Alliance & London	1,157,936	625	236	39	32	21	16	17	dem.	2
Wesleyan & General	15,090	553	193	34	38	35	53	79	ω	0
TOTAL	10,095,171	615	240	39	32	24	19	14	=	2
TOTAL of 1990 data	8,354,141	616	243	36	32	24	19	4	5	ო
		* For thes	е сотрапі	* For these companies separate Comp data were available	Comp data	a were avail	able			

Risk Group:	MOTOR - C	COMPREHENSIVE	NSIVE				Method : Basic Chain Ladder
			RUN-OFF	PATTERNE	PATTERN PER MILLE (Contd.)	Contd.)	
Name	တ	10	7-	12	13	4	15+
Avon	0	0	0	0	0	0	0
Britannic	7	4	₩-	0	0	0	0
Commercial Union	0	0	0	0	0	0	0
Co-operative	က	~		7		0	-
Comhill	*-	7	0	0	0	0	4
Facile Star *	c	ď	•	c	c	c	c
Coporal Accident	1 0) τ		, c	,	•	.
General Accident	۷ (- (()	> ())
Guardian Royal	0	0	0	0	0	0	0
Iron Trades Mutual *	က	4	5	7	0	0	0
Legal & General	-	က	0	0	0	0	4
London & Edinburgh	8	~	0	0	0	0	0
Nat. Farmers Union Mut.		0	0	0	0	0	0
Nat.insurance & G'tee	0	0	0	0	0	0	0
Norman *	7	0	0	0	0	0	0
Norwich Union *	7	9	7	0	0	0	0
Pearl	0	0	0	0	0	0	0
Provincial		~	0	0	0	0	0
Prudential	-	က	₩-	0	0	0	0
Royal *	က	0			0	0	0
Sun Alliance & London	0	0	0	0	0	0	0
Wesleyan & General	7	0	જ	0	0	0	0
TOTAL	₩-	-	0	0	0	0	0
TOTAL of 1990 data	2	τ-	-	0	0		(14+)
		* For these	For these companies separate Comp data were available	separate Co	mp data we	re available	

Risk Group:	MOTOR - CON	COMPREHENSIVE	NSIVE				Method : B:	Method : Basic Chain Ladder	adder
				MEAN TERMS	SMS				
Name	0	-	7	က	4	2	9	7	8
Avon	1.24	1.49	2.20	1.86	1.57	1.15	1.11	0.99	0.71
Britannic	1.44	1.94	2.83	2.60	2.40	2.17	1.55	1.43	1.56
Commercial Union	1.20	1.47	2.21	1.94	1.63	1.39	1.11	0.85	1.73
Co-operative	1.49	2.06	3.08	2.79	2.49	2.27	2.01	2.06	2.87
Comhill	1.34	1.69	2.44	2.22	2.04	1.68	1.84	1.93	2.96
Eagle Star *	1.32	1.63	2.54	2.32	2.16	2.00	2.02	1.94	1.87
General Accident	1.34	1.68	2.67	2.39	2.12	1.82	1.55	1.56	2.14
Guardian Royal	1.24	1.42	2.08	1.80	1.53	1.24	1.07	0.92	1.23
Iron Trades Mutual *	1.38	1.97	3.24	3.04	2.93	2.73	2.59	2.04	2.00
Legal & General	1.62	2.14	3.36	3.03	2.68	2.26	2.07	1.52	4.04
London & Edinburgh	1.43	1.74	2.43	2.19	2.04	1.57	1.12	1.40	1.62
Nat. Farmers Union Mut.	1.42	1.84	2.56	2.17	1.87	1.52	1.24	0.88	1.11
Nat.Insurance & G'tee	1.28	1.52	2.36	2.04	1.66	1.37	1.12	0.72	0.95
Norman *	1.22	1.49	2.07	1.81	1.77	1.78	1.72	1.38	0.71
Nowich Union *	1.40	1.66	2.68	2.45	2.30	2.22	2.10	1.96	1.81
Pearl	1.37	1.50	1.96	1.54	1.1	0.85	0.79	1.61	1.71
Provincial	1.35	1.70	2.60	2.32	2.06	1.73	1.38	96.0	1.25
Prudential	1.35	1.76	2.72	2.50	2.26	1.91	1.68	1.36	1.98
Royal *	1.39	1.76	2.69	2.47	2.26	2.10	1.81	1.58	1.63
Sun Alliance & London	1.28	1.58	2.40	2.15	1.94	1.60	1.16	96.0	1.61
Wesleyan & General	1.88	2.59	3.19	2.60	2.04	1.40	0.91	2.06	2.85
TOTAL	1.32	1.63	2.49	2.23	1.98	1.71	1.48	1.36	2.21
TOTAL of 1990 data	1.31	1.60	2.51	2.26	2.05	1.87	1.84	2.25	2.37
		* For these	companies	For these companies separate Comp data were available	omp data we	re available			

Risk Group:	MOTOR	MOTOR - COMPREHENSIVE	INSIVE			-	Method : Basic Chain Ladder
Name	o	9	*	MEAN IEK 12	MEAN 1 EKIMS (CONIG.) 12 13	4	15+
Avon	0.74	0.50				3	**
Britannic	1.37	0.79	0.50	i	1	1	*
Commercial Union	2.22	2.53	2.49	2.74	4.56	3.56	2.00
Co-operative	2.94	2.89	2.49	1.74	1.92	2.49	2.00
Comhill	2.85	2.31	4.58	4.30	3.42	2.47	2.00
Eagle Star *	1.69	1.09	0.95	0.92	0.90	0.50	**
General Accident	2.15	2.23	2.02	2.54	2.46	1.49	2.00
Guardian Royal	1.38	1.06	0.87	1.32	0.50	ł	į
Iron Trades Mutual *	1.98	1.42	0.89	0.77	2.38	3.00	2.00
Legal & General	4.40	3.97	5.90	5.22	4.24	3.00	2.00
London & Edinburgh	1.16	0.88	1.27	1.50	0.50	ŀ	***
Nat. Farmers Union Mut.	0.97	1.44	0.77	5.00	4.00	3.00	2.00
Nat.Insurance & G'tee	0.95	0.69	0.22	0.50	Bas 191	ţ	à *
Norman *	0.50	ł	1	ı	I	1	wy
Nowich Union *	1.43	0.68	0.35	2.11	1.11	0.50	•
Pearl	0.83	0.83	0.50	į	1	1	ţ
Provincial	1.50	0.80	1.4.1	1.88	4.00	3.00	2.00
Prudential	1.62	0.99	96.0	1.32	0.50	1	4
Royal *	2.26	3.15	2.38	2.00	2.53	3.00	2.00
Sun Alliance & London	2.22	2.11	3.18	3.18	2.10	7.48	2.00
Wesleyan & General	1.96	1.47	0.50	ž ž	3 3	3	ı
TOTAL	2.34	2.24	2.54	2.60	2.56	2.37	2.00
TOTAL of 1990 data	2.50	2.47	2.75	2.71	2.47	2.00	
		* For these	companie.	s separate Co	* For these companies separate Comp data were available	e available	

Size	0 1 2 3 4 5 6 7 624 232 36 35 23 27 11 4 614 219 39 35 23 27 11 24 16 612 226 37 29 25 17 12 8 612 226 37 41 33 25 17 12 8 612 226 42 35 23 26 12 9 612 226 42 35 23 26 12 9 613 237 41 33 23 19 11 7 630 228 37 31 22 18 11 7 630 228 37 31 22 13 43 43 630 228 37 41 35 13 43 615 247	Risk Group : Future Inflation :	MOTOR - COMI 8.00%		ASIVE	RUN-OFF	PATTERN	RUN-OFF PATTERN PER MILLE		Method : Average Claim	rerage Cla	<u>E</u>
94,483 624 232 36 35 27 11 4 4 23,622 614 219 39 35 27 11 24 16 638,965 612 226 35 27 27 21 20 15 454,893 612 226 42 35 23 26 12 9 1,032,911 620 226 35 33 25 18 11 7 1,261,494 617 239 35 23 19 18 11 1,261,494 617 239 35 23 19 18 11 1,032,911 620 228 37 31 22 17 8 10 1,032,911 620 228 37 31 22 17 8 10 1,041,921 561 239 35 30 24 35 13 43 1,056,922 582 272 40 36 27 21 11 10 1,056,922 582 272 40 36 27 15 19 17 1,056,922 620 227 38 30 23 19 17 1,056,922 620 227 38 30 23 17 15 10 1,056,922 620 237 40 36 24 17 17 13 1,056,922 620 237 40 36 24 17 17 13 1,056,921 620 237 40 33 22 16 16 11 1,056,11 615 237 39 32 24 17 15 15 10,095,171 615 237 39 32 24 19 14 11 10,095,171 615 237 39 32 24 19 14 11 10,095,171 615 237 39 32 24 19 14 18	Type State S		Size	0	-	2	3	4	5	9	7	ထ
23,622 614 219 39 35 27 11 24 16 68 612 212 36 37 29 25 17 12 8 68 612 212 36 32 27 21 21 20 9 612 226 42 35 23 26 12 9 9 15 1261,404 617 236 35 30 23 18 11 7 7 12 8 11 7 12 9 10 10 10 10 10 10 10 10 10 10 10 10 10	23,622 614 219 39 35 27 11 24 16 58 58,946 643 226 37 29 25 17 12 24 16 58 638,965 612 226 42 36 32 27 21 21 20 15 59 51 226 42 36 32 27 21 21 20 15 59 51 226,398 630 228 37 31 22 17 8 11 11 11 11 11 11 11 11 11 11 11 11 1		94,483	624	232	36	35	23	27	11	4	9
1,261,734 643 226 37 29 25 17 12 8 454,893 612 212 36 32 27 21 20 15 454,893 612 226 42 35 23 26 12 9 1,261,494 617 236 35 30 23 18 11 7 1,261,494 617 236 35 30 23 18 11 7 1,261,494 617 236 35 30 23 18 11 7 1,261,494 617 236 35 30 23 18 10 5 1,261,391 620 228 37 31 22 17 8 10 1,41,921 561 239 35 30 24 35 13 43 1,41,921 561 230 42 44 25 18 8 3 1,056,922 582 272 40 36 27 15 10 7 1,056,922 582 272 40 36 27 15 10 1,056,922 582 272 40 36 27 15 10 1,056,922 582 272 40 36 27 15 10 1,157,936 620 237 40 33 22 16 16 11 1,090 555 192 33 32 24 19 14 11 1,090 541,141 612 238 38 32 24 19 14 11 1,090 541,141 612 238 38 32 24 19 14 11 1,090 1,157,936 1,157,9	1,261,734 643 226 37 29 25 17 12 8 454,893 612 212 36 32 27 21 20 15 454,893 612 226 42 35 23 25 18 11 7 1,261,494 617 236 35 30 23 19 18 11 7 1,261,494 617 236 35 30 23 18 11 7 1,261,494 617 236 35 30 23 18 11 7 1,261,494 617 236 35 30 23 18 10 5 1,261,494 617 236 35 30 23 18 10 5 1,41,921 561 239 35 30 24 35 13 43 1,41,921 563 247 38 30 27 19 17 1,656,922 582 272 40 36 27 15 10 7 1,056,922 582 272 40 36 27 15 10 7 1,056,922 582 272 40 35 28 17 15 10 1,566,922 582 272 40 33 22 16 16 11 1,056,922 582 272 38 30 27 15 16 11 1,056,922 582 272 38 30 27 15 16 11 1,056,922 582 272 38 30 32 24 19 14 11 1,056,921 615 237 39 32 24 19 14 11 1,095,171 615 238 38 32 24 19 14 11 1,095,171 615 238 38 32 24 19 14 11 1,095,171 615 238 38 32 24 19 14 14 11 1,095,171 612 238 38 32 24 19 14 14 11 1,095,171 615 238 38 32 24 19 14 14 11 1,095,171 615 238 38 32 24 19 14 14 14 14 1,0095,171 615 237 39 32 24 19 14 14 14 14 14 14 1	<u>.</u>	23,622	614	219	39	35	27	‡	24	16	9
Figure F	Fig. 638,965 G12 C12 36 32 27 21 20 15 Fig. 638,965 G12 C12 C1	rcial Union	524,734	643	226	37	29	25	17	12	œ	-
1,261,494 612 226 42 35 25 18 11 7 1,261,494 617 236 35 30 23 19 18 11 7 1,051,494 617 236 35 30 23 19 18 11 7 1,032,911 620 228 37 31 22 17 8 10 5 1,056,925 581 220 39 41 31 27 19 10 1,056,922 582 272 40 36 27 21 11 10 1,056,922 582 272 40 36 27 15 10 1,056,925 610 233 42 35 24 17 17 13 1,056,926 610 233 42 35 24 17 17 13 1,056,927 610 233 42 35 24 17 17 13 1,056,928 620 237 40 33 22 16 16 11 1,056,927 612 238 33 32 24 17 17 13 1,056,927 612 233 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615 237 39 32 24 19 14 11 1,005,171 615	454,893 612 226 42 35 23 26 12 9 1,261,494 617 236 35 30 23 19 18 11 7 1,261,494 617 236 35 30 23 19 18 11 7 1,032,91 620 246 42 33 23 18 10 5 141,921 561 239 35 30 24 35 13 43 on Mut. 225,137 583 241 45 43 20 20 31 43 on Mut. 225,137 583 241 45 44 31 27 19 16 10 3tee 358,044 615 247 36 27 24 17 11 10 11 10 11 10 11 10 11 11 10 11 11 11 11 1	rative	638,965	612	212	36	32	27	21	20	15	7
T98,671 618 237 41 33 25 18 11 7 7 7 7 7 7 7 7	1,261,494 617 236 35 30 23 18 11 7 7 7 7 7 7 7 7		454,893	612	526	42	35	23	56	12	တ	4
1,261,494 617 236 35 30 23 19 18 11 1,032,911 620 246 42 33 23 18 10 5 1,032,911 620 246 42 33 23 18 10 5 1,032,911 620 228 37 31 22 17 8 10 5 1qh 226,137 581 241 45 43 20 20 31 8 10 17 10 17 11 10 17 11 10 17 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 11 10 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11	1,261,494 617 236 35 30 23 19 18 11 1,032,911 620 246 42 33 23 18 10 5 1,032,911 620 228 37 31 22 17 8 10 1,032,911 620 228 37 31 22 17 8 10 1,056,921 561 239 35 30 24 35 13 43 1,066,922 582 272 40 36 27 21 11 10 1,056,922 582 272 40 36 27 15 10 1,056,922 582 272 38 30 27 21 11 10 1,056,922 582 272 40 36 27 15 10 1,056,923 610 233 42 35 24 17 17 13 1,056,924 615 237 38 30 23 22 16 16 11 1,056,925 610 233 42 35 24 17 17 13 1,056,927 610 233 42 35 24 17 17 13 1,056,927 610 233 42 35 24 17 15 9 1,056,927 610 233 42 35 24 17 15 9 1,056,927 610 233 42 33 32 24 19 14 11 1,056,927 610 233 33 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615	Star *	798,671	618	237	4	33	25	18	-	7	4
1,032,911 620 246 42 33 23 18 10 5 266,398 630 228 37 31 22 17 8 10 141,921 561 239 35 30 24 35 13 43 141,921 561 239 35 30 24 35 13 43 10,055,177 583 241 45 43 20 20 31 8 1,056,922 582 272 40 36 27 21 11 10 1,056,922 567 252 52 44 43 30 9 1 1,056,922 567 252 52 44 43 30 9 1 1,056,922 610 233 35 24 17 17 13 1,056,923 620 227 38 30 23 20 13 17 1,157,936 620 237 40 33 22 16 16 11 1,157,936 620 237 39 35 24 17 15 9 1,0095,171 615 237 39 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 8 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 11 1,0095,171 615 238 38 32 24 19 14 14 14 1,0095,171 615 238 38 32 24 19 14 14 14 14 1,0095,171 615 238 38 32 24 19 14 14 14 14 14 14 1	1,032,911 620 246 42 33 23 18 10 5 266,398 630 228 37 31 22 17 8 10 141,921 561 239 35 30 24 35 13 43 141,921 561 239 35 30 24 35 13 43 19h 225,137 583 241 45 44 31 27 19 17 358,044 615 247 38 30 27 21 11 10 1,056,922 582 272 40 36 27 15 10 7 1,056,922 582 272 40 36 27 15 10 7 1,056,923 567 252 52 44 43 30 9 1 1,056,924 567 252 52 44 43 30 9 1 330,901 613 234 39 35 24 17 17 13 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 9 15,090 555 192 33 36 38 54 75 8 10,095,171 615 238 38 32 24 19 14 11 11,044 612 238 38 32 24 19 14 8 11,044 612 238 38 32 24 19 14 11 12,044 612 238 38 32 24 19 14 14 13,044 612 238 38 32 24 19 14 14 14,045 14,041 612 238 38 32 24 19 14 14 14 15,050 555	Il Accident	1,261,494	617	236	35	30	23	19	18		4
266,398 630 228 37 31 22 17 8 10 141,921 561 239 35 30 24 35 13 43 41,921 561 239 35 30 24 35 43 43 43 43 43 43 43 43 44 43 44 27 19 17 10 17 10 17 10 17 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 11 10 11 11 10 11 11 11 11 11 11 11 11 11 11 11 <td>226,398 630 228 37 31 22 17 8 10 141,921 561 239 35 30 24 35 13 43 225,137 583 241 45 43 20 20 31 8 8 38,044 615 247 38 30 27 21 11 10 1,056,922 582 272 40 36 27 15 10 7 90,050 567 252 38 30 24 17 17 13 90,050 620 227 38 35 24 17 17 13 462,300 620 227 38 35 24 17 17 13 90,050 620 227 38 35 24 17 17 13 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 8 8,354,141 612 238 38 32 24 19 14 8 *For these companies separate Comp data were available</td> <td>an Royal</td> <td>1,032,911</td> <td>620</td> <td>246</td> <td>42</td> <td>33</td> <td>23</td> <td>18</td> <td>10</td> <td>ည</td> <td>7</td>	226,398 630 228 37 31 22 17 8 10 141,921 561 239 35 30 24 35 13 43 225,137 583 241 45 43 20 20 31 8 8 38,044 615 247 38 30 27 21 11 10 1,056,922 582 272 40 36 27 15 10 7 90,050 567 252 38 30 24 17 17 13 90,050 620 227 38 35 24 17 17 13 462,300 620 227 38 35 24 17 17 13 90,050 620 227 38 35 24 17 17 13 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 8 8,354,141 612 238 38 32 24 19 14 8 *For these companies separate Comp data were available	an Royal	1,032,911	620	246	42	33	23	18	10	ည	7
141,921 561 239 35 30 24 35 13 43 43 44 251,700 597 220 39 41 31 27 19 17 10 10 1056,922 582 272 40 36 27 15 11 10 10 1056,922 582 272 40 36 27 15 10 7 1056,922 582 272 40 36 27 15 10 7 10 10 1157,936 620 227 38 30 22 16 16 11 11 11 11 11	43	ades Mutual *	266,398	630	228	37	31	22	17	ထ	9	9
Aut. 225,137 583 241 45 43 20 20 20 31 8 a 358,044 615 247 38 30 41 31 27 19 17 a 56,479 624 220 39 41 25 18 8 3 1,056,922 582 272 40 36 27 15 10 17 1,056,922 582 272 44 25 18 8 3 1,056,922 582 272 44 43 30 9 1 90,050 567 252 52 44 43 30 9 1 462,300 620 227 38 30 23 22 16 17 13 85,520 610 233 42 35 22 16 16 11 15,090 555 192 33 24 19 14<	Aut. 225,137 583 241 45 43 20 20 20 31 8 a 358,044 615 247 38 30 27 21 11 10 56,479 624 230 42 44 25 18 8 3 1,056,922 582 272 40 36 27 15 10 17 90,050 567 252 52 44 43 30 9 1 462,300 620 227 38 35 24 17 17 13 462,300 620 227 38 30 23 22 16 17 17 852,520 610 233 42 35 22 16 16 11 15,090 555 192 33 24 16 16 17 17 10,095,171 615 237 24 19	& General	141,921	561	239	35	30	24	35	13	43	4
Wult. 251,700 597 220 39 41 31 27 19 17 e 358,044 615 247 38 30 27 21 11 10 56,479 624 230 42 44 25 18 8 3 1,056,922 582 272 40 36 27 15 10 7 90,056 567 252 52 44 43 30 9 1 462,300 620 227 38 30 23 24 17 17 13 852,520 610 233 42 35 28 17 15 9 nn 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 36 38 54 75 8 8,354,141 612 238 32 24 19 </td <td>Mut. 251,700 597 220 39 41 31 27 19 17 e 358,044 615 247 38 30 27 21 11 10 f 56,479 624 230 42 44 25 18 8 3 f 1,056,922 582 272 40 36 27 15 10 7 g 0,050 567 252 52 44 43 30 9 1 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 99 n 1,157,936 620 237 40 33 22 16 16 11 10,095,171 615 237 39 32 24 19 14 11 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8</td> <td>n & Edinburgh</td> <td>225,137</td> <td>583</td> <td>241</td> <td>45</td> <td>43</td> <td>50</td> <td>20</td> <td>31</td> <td>ထ</td> <td>က</td>	Mut. 251,700 597 220 39 41 31 27 19 17 e 358,044 615 247 38 30 27 21 11 10 f 56,479 624 230 42 44 25 18 8 3 f 1,056,922 582 272 40 36 27 15 10 7 g 0,050 567 252 52 44 43 30 9 1 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 99 n 1,157,936 620 237 40 33 22 16 16 11 10,095,171 615 237 39 32 24 19 14 11 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8	n & Edinburgh	225,137	583	241	45	43	50	20	31	ထ	က
e 358,044 615 247 38 30 27 21 11 10 56,479 624 230 42 44 25 18 8 3 1,056,922 582 272 40 36 27 15 10 7 90,050 567 252 52 44 43 30 9 1 462,300 620 227 38 30 23 20 13 17 855,520 610 233 42 35 28 17 15 9 0n 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 33 36 38 54 75 8 8,354,141 612 237 39 32 24 19 14 11	e 358,044 615 247 38 30 27 21 11 10 10 56,479 624 230 42 44 25 18 8 3 3 1 1,056,922 582 272 40 36 27 15 15 10 7 7 1,056,922 582 272 40 36 27 15 15 10 7 7 13 30,901 613 234 39 35 24 17 17 17 13 462,300 620 227 38 30 23 20 13 17 15 9 0n 1,157,936 620 237 40 33 22 16 16 16 11 11 11 11 11 11 11 11 11 11	armers Union Mut.		282	220	39	41	31	27	19	17	2
56,479 624 230 42 44 25 18 8 3 1,056,922 582 272 40 36 27 15 10 7 90,050 567 252 52 44 43 30 9 1 330,901 613 234 39 35 24 17 17 13 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 9 n 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8	56,479 624 230 42 44 25 18 8 3 1,056,922 582 272 40 36 27 15 10 7 90,050 567 252 52 44 43 30 9 1 330,901 613 234 39 35 24 17 17 13 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 9 n 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 8 8,354,141 612 238 38 32 24 19 14 8 8 354,141 612 238 38 32 24	urance & G'tee	358,044	615	247	38	30	27	77		£	7
1,056,922 582 272 40 36 27 15 10 7 90,050 567 252 52 44 43 30 9 1 330,901 613 234 39 35 24 17 17 13 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 9 on 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 11	1,056,922 582 272 40 36 27 15 10 7 90,050 567 252 52 44 43 30 9 1 330,901 613 234 39 35 24 17 17 13 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 9 01 1,157,936 620 237 40 33 22 16 16 11 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8	*=	56,479	624	230	42	44	25	18	æ	က	9
90,050 567 252 52 44 43 30 9 1 330,901 613 234 39 35 24 17 17 13 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 9 on 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 33 36 38 54 19 14 11 8,354,141 612 238 38 32 24 19 14 8	90,050 567 252 52 44 43 30 9 1 330,901 613 234 39 35 24 17 17 13 462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 9 on 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8	h Union *	1,056,922	582	272	40	36	27	15	10	7	4
330,901 613 234 39 35 24 17 17 13 13 17 462,300 620 227 38 30 23 20 13 17 17 15 15 9 17 157,936 620 237 40 33 22 16 16 16 11 15,090 555 192 33 36 38 54 19 14 11 8,354,141 612 238 38 32 24 19 14 8	330,901 613 234 39 35 24 17 17 13 462,300 620 227 38 30 23 20 13 17 17 13 17 15 9 17 15,090 620 237 40 33 22 16 16 16 11 15,090 555 192 33 36 38 54 19 14 11 8,354,141 612 238 38 32 24 19 14 8 8 12 238 38 32 24 19 14 8 8 12 238 38 32 24 19 14 8		90,050	267	252	52	44	43	စ္တ	თ	4	0
462,300 620 227 38 30 23 20 13 17 852,520 610 233 42 35 28 17 15 9 on 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8	462,300 620 227 38 30 23 20 13 17 15 9 17 15 9 17 157,936 620 237 40 33 22 16 16 11 11 157,936 620 237 40 33 22 16 16 11 11 15,090 555 192 33 36 38 54 75 8 17 11 11 11 11 11 11 11 11 11 11 11 11	cial	330,901	613	234	33	35	24	17	17	5	5
852,520 610 233 42 35 28 17 15 9 0 1 1,157,936 620 237 40 33 22 16 16 11 11 15,090 555 192 33 36 38 54 75 8 11 10,095,171 615 237 39 32 24 19 14 11 11 18,354,141 612 238 38 32 24 19 14 8	852,520 610 233 42 35 28 17 15 9 0 1 1,157,936 620 237 40 33 22 16 16 11 11 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ıtial	462,300	620	227	38	င္က	23	20	13	17	ო
10,095,171 615 237 40 33 22 16 16 11 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8	0n 1,157,936 620 237 40 33 22 16 16 11 15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8 * For these companies separate Comp data were available		852,520	610	233	42	35	28	17	15	G	9
15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8	15,090 555 192 33 36 38 54 75 8 10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8 * For these companies separate Comp data were available	liance & London	1,157,936	620	237	40	33	22	16	9	=	2
10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8	10,095,171 615 237 39 32 24 19 14 11 8,354,141 612 238 38 32 24 19 14 8 ** * For these companies separate Comp data were available	yan & General	15,090	555	192	33	98	88	54	75	ω	0
8,354,141 612 238 38 32 24 19 14 8	8,354,141 612 238 38 32 24 19 14 8	•	10,095,171	615	237	39	32	24	19	4		ო
	* For these companies separate Comp data were available	of 1990 data	8,354,141	612	238	38	32	24	19	4	œ	ß

	MOTOR - 0	TOR - COMPREHENSIVE	NSIVE				Method : Average Claim
Inflation:	8.00%		RUN-OFF P	PATTERN P	TERN PER MILLE (Contd.)	Contd.)	
Name	တ	10		12	13	14	15+
Avon	-	0	0	0	0	0	0
Britannic	ო	2	7	0	0	0	0
Commercial Union	-	0	0	0	0	0	0
Co-operative	4	8	·	4	ო	-	4
Cornhill	2	ĸ	0	O	0	0	4
Eagle Star *	7	8	-	0	0	0	0
General Accident	ო	***	8	0	0	0	, 4
Guardian Royal	-	0	0	o	0	0	0
Iron Trades Mutual *	7	4	4		0	0	. 0
Legal & General	2	ß	0	0	0	0	· 6
London & Edinburgh	က	2	0	O	0	o	C
Nat. Farmers Union Mut.	ო	0	_	0	0	0	0
Nat.Insurance & G'tee	*	0	0	0	0	0	. 0
Norman *	7	0	0	O	0	0	. 0
Norwich Union *		4	·	0	0	0	0
Pearl	-	0	0	0	0	0	O
Provincial	τ-	8	0	0	0	0	0
Prudential	Ø	4	N	Ö	0	0	0
Royal *	7	0	0	-	0	0	0
Sun Alliance & London	~		0	0	0	0	· •
Wesleyan & General	ო	0	7	0	0	0	0
TOTAL	7	₩-	4	0	0	0	*
TOTAL of 1990 data	ო	8	₩.	f	0	-	(14+)
		* For these	companies	separate Co	For these companies separate Comp data were available	e available	

Risk Group:	MOTOR - (MOTOR - COMPREHENSIVE	NSIVE				Method: A	Method: Average Claim	=
Future Inflation:	8.00%			MEAN TERMS	SMS			•	
Name	0	-	2	အ	4	5	9	7	80
Avon	1.30	1.62	2.41	2.05	1.78	1.37	1.41	1.29	0.73
Britannic	1.46	1.99	2.94	2.70	2.52	2.33	1.69	1.59	1.66
Commercial Union	1.22	1.53	2.31	2.04	1.72	1.51	1.28	1.14	1.98
Co-operative	1.60	2.33	3.53	3.30	3.13	2.99	2.86	3.03	3.58
Comhill	1.44	1.92	2.90	2.76	2.71	2.52	2.97	3.24	3.79
Eagle Star *	1.32	1.64	2.50	2.28	2.11	1.96	1.90	1.85	1.71
General Accident	1.38	1.80	2.87	2.61	2.38	2.10	1.86	1.93	2.30
Guardian Royal	1.23	1.42	2.11	1.85	1.62	1.35	1.24	1.16	1.18
Iron Trades Mutual *	1.35	1.80	2.89	2.73	2.65	2.56	2.58	2.19	2.14
Legal & General	1.79	2.45	3.78	3.47	3.15	2.71	2.74	2.21	4.95
London & Edinburgh	1.47	1.82	2.63	2.36	2.26	1.76	1.28	1.69	1.68
Nat. Farmers Union Mut.	1.49	1.94	2.68	2.28	1.99	1.66	1.39	1.05	1.13
Nat.Insurance & G'tee	1.28	1.53	2.36	2.06	1.71	1.42	1.25	0.87	0.95
Norman *	1.26	1.52	2.12	1.77	1.69	1.51	1.57	1.39	0.71
Norwich Union *	1.35	1.53	2.44	2.17	2.05	2.04	1.89	1.73	1.64
Pearl	1.39	1.55	2.02	1.63	1.22	96.0	1.17	2.26	1.71
Provincial	1.36	1.73	2.60	2.32	2.10	1.81	1.42	1.17	1.33
Prudential	1.39	1.84	2.84	2.62	2.38	2.09	1.89	1.50	1.97
Royal *	1.37	1.72	2.54	2.30	2.10	1.98	1.72	1.63	1.67
Sun Alliance & London	1.31	1.62	2.48	2.25	2.09	1.83	1.50	1.48	2.71
Wesleyan & General	1.89	2.63	3.25	2.66	2.08	1.49	1.06	2.43	2.89
TOTAL	1.35	1.72	2.66	2.43	2.24	2.02	1.88	1.91	2.65
TOTAL of 1990 data	1.38	1.76	2.76	2.54	2.37	2.21	2.13	2.23	2.33
		* For these	companies	For these companies separate Comp data were available	ımp data we	re available			

an and an and an and an and an an and an an and an and an and an and an and an an and an an and an an an and an	Risk Group :	MOTOR - (MOTOR - COMPREHENSIVE	NSIVE	1			Method : Average Claim	E E
nic 1.38 0.78 0.50	Future Inflation : Name	8.00% 9	10	7	MEAN TER 12	RMS (contd.) 13	4	15+	
rectal Union 2.59 3.06 3.15 3.26 4.68 3.68 3.69 3.65 3.08 2.30 2.43 2.52 3.00 3.15 3.38 5.42 4.88 3.97 3.00 3.15 3.81 5.42 4.88 3.97 3.00 3.14 5.24 4.88 3.97 3.00 3.00 3.15 1.11 0.99 0.99 0.85 0.50 3.00 3.00 3.00 3.00 3.00 3.00 3.0	uo/	0.73	0.50		:	i	1	1	
2.59 3.06 3.15 3.26 4.68 3.68 3.69 3.69 3.69 3.61 3.38 5.42 4.88 3.97 3.00 2.43 2.52 3.01 2.40 2.56 2.53 3.60 3.96 3.00 2.40 2.56 2.53 3.60 3.96 3.00 2.40 2.56 2.53 3.60 3.96 3.00 2.40 2.56 2.53 3.60 3.96 3.00 2.40 2.56 2.53 3.60 3.96 3.00 2.40 2.56 2.53 3.60 3.96 3.00 2.40 2.56 2.53 3.60 3.96 3.00 2.50 2.40 2.50 2.90 0.98 0.77 2.51 3.00 2.50 2.90 0.98 0.99 0.90 0.90 0.90 0.90 0.90 0	itannic	1.38	0.78	0.50	ŀ	:	:	1	
3.69 3.55 3.08 2.30 2.43 2.52 3.08 1.53 1.11 0.99 0.99 0.85 0.50 2.40 2.40 2.56 2.53 3.60 3.96 3.00 2.40 1.33 1.06 0.91 1.31 0.50 1.33 1.06 0.91 1.31 0.50 5.24 4.78 5.94 5.12 4.12 3.00 2.90 0.99 0.85 0.50 1.23 0.96 1.42 1.50 0.50 1.24 0.25 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.3	ommercial Union	2.59	3.06	3.15	3.26	4.68	3.68	2.00	
tar* 1.53 1.11 0.99 0.99 0.85 0.50 1.70 In Royal 1.33 1.06 0.91 1.31 0.50 General 2.04 1.31 0.85 0.77 2.51 3.00 3.00 General 2.04 1.23 0.96 1.42 1.20 0.50 In Union* 1.39 0.86 0.84 0.50 1.89 0.80 0.80 0.80 1.15 0.80 0.80 0.80 1.15 0.80 0.80 0.80 0.80 1.15 0.80 0.80 0.80 0.80 1.15 0.80 0.80 0.80 1.15 0.80 0.80 0.80 1.15 0.80 0.80 0.80 1.10 0.80 0.80 0.80 1.10 0.80 0.80 0.80 0.80 1.10 0.80	o-operative	3.69	3.55	3.08	2.30	2.43	2.52	2.00	
1.53 1.11 0.99 0.99 0.85 0.50 2.40 2.56 2.53 3.60 3.96 3.00 3.00 2.40 2.56 2.53 3.60 3.96 3.96 3.00 2.04 1.33 1.06 0.91 1.31 0.50 2.04 1.31 0.85 0.77 2.51 3.00 2.04 1.31 0.85 0.77 2.51 3.00 2.04 1.31 0.85 0.77 2.51 3.00 2.09 0.71 0.19 0.50	omhill	3.81	3.38	5.42	4.88	3.97	3.00	2.00	
2.40 2.56 2.53 3.60 3.96 3.00 1.33 1.06 0.91 1.31 0.50 - 2.04 1.31 0.85 0.77 2.51 3.00 - 5.24 4.78 5.94 5.12 4.12 3.00	agle Star *	1.53	1.1	0.99	0.99	0.85	0.50	1	
1.33 1.06 0.91 1.31 0.50 2.04 1.31 0.85 0.77 2.51 3.00 5.24 4.78 5.94 5.12 4.12 3.00 5.24 4.78 5.94 5.12 4.12 3.00 Mut. 1.23 0.96 1.42 1.50 0.50 0.98 0.71 0.19 0.50 1.39 0.66 0.31 2.15 1.15 0.50 1.59 0.99 0.88 1.30 4.00 3.00 1.59 0.99 0.88 1.30 0.50 2.39 3.01 2.25 1.83 2.40 3.00 I 1.96 1.47 0.50 1.84 2.81 2.81 2.93 2.95 3.35 3.40 3.24 2.81 2.93 2.95 2.69 2.66 2.47 2.00	eneral Accident	2.40	2.56	2.53	3.60	3.96	3.00	2.00	
2.04 1.31 0.85 0.77 2.51 3.00 5.24 4.78 5.94 5.12 4.12 3.00 5.24 4.78 5.94 5.12 4.12 3.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00	uardian Royal	1.33	1.06	0.91	1.31	0.50	ŀ	:	
5.24 4.78 5.94 5.12 4.12 3.00 Mut. 1.23 0.96 1.42 1.50 0.50 — Mut. 1.02 1.76 1.22 5.00 4.00 3.00 se 0.98 0.71 0.19 0.50 — 0.50 — — — — — — — 1.39 0.66 0.31 2.15 1.15 0.50 1.68 1.03 2.42 3.30 4.00 3.00 1.59 0.99 0.88 1.30 0.50 — 2.39 3.01 2.25 1.83 2.40 3.00 2.39 3.01 2.25 1.83 2.40 3.00 1 1.96 1.47 0.50 — — — — — 1 2.93 2.95 3.35 3.40 3.24 2.81 2.47 2.42 2.69 2.66 2.47 2.00	on Trades Mutual *	2.04	1.31	0.85	0.77	2.51	3.00	2.00	
1.23 0.96 1.42 1.50 0.50 1.02 1.76 1.22 5.00 4.00 3.00 0.98 0.71 0.19 0.50 0.50 1.39 0.66 0.31 2.15 1.15 0.50 1.88 0.08 0.50 1.68 1.03 2.42 3.30 4.00 3.00 1.59 0.99 0.88 1.30 0.50 2.39 3.01 2.25 1.83 2.40 3.00 3.75 3.74 4.27 3.71 2.68 2.33 1.96 1.47 0.50 2.93 2.95 3.35 3.40 3.24 2.81 2.47 2.47 2.69 2.66 2.47 2.00	əgal & General	5.24	4.78	5.94	5.12	4.12	3.00	2.00	
1.02 1.76 1.22 5.00 4.00 3.00 0.98 0.71 0.19 0.50 - - - 0.50 - - - - - - 1.39 0.66 0.31 2.15 1.15 0.50 1.39 0.66 0.31 2.15 1.15 0.50 1.68 1.03 2.42 3.30 4.00 3.00 1.68 1.03 2.242 3.30 4.00 3.00 2.39 3.01 2.25 1.83 2.40 3.00 2.39 3.74 4.27 3.71 2.68 2.33 1.96 1.47 0.50 - - - 2.93 2.95 3.35 3.40 3.24 2.81 2.47 2.42 2.69 2.66 2.47 2.00	ondon & Edinburgh	1.23	96.0	1.42	1.50	0.50	;	i	
0.98 0.71 0.19 0.50 0.50 1.39 0.66 0.31 2.15 1.15 0.50 0.86 0.84 0.50 1.68 1.03 2.42 3.30 4.00 3.00 1.59 0.99 0.88 1.30 0.50 2.39 3.01 2.25 1.83 2.40 3.00 3.75 3.74 4.27 3.71 2.68 2.33 1.96 1.47 0.50 2.93 2.95 3.35 3.40 3.24 2.81 2.47 2.42 2.69 2.66 2.47 2.00	at. Farmers Union Mut.	1.02	1.76	1.22	5.00	4.00	3.00	2.00	
ch Union* 0.50	at.Insurance & G'tee	0.98	0.71	0.19	0.50	1	•	ı	
ch Union* 1.39 0.66 0.31 2.15 1.15 0.50 ncial	orman *	0.50	ŀ	:	1	1	ŀ	1	
ncial 1.68 1.03 2.42 3.30 4.00 3.00 1.1 2.39 1.30 0.89 0.88 1.30 0.50 2.39 3.01 2.25 1.83 2.40 3.00 3.00 3.01 3.75 3.74 4.27 3.71 2.68 2.33 2.40 3.00 3.01 2.93 2.95 3.35 3.40 3.24 2.81 2.91 2.42 2.69 2.66 2.47 2.00	orwich Union *	1.39	99.0	0.31	2.15	1.15	0.50	:	
ncial 1.68 1.03 2.42 3.30 4.00 3.00 antial 1.59 0.99 0.88 1.30 0.50 2.39 3.01 2.25 1.83 2.40 3.00 3.00 antial 3.75 3.74 4.27 3.71 2.68 2.33 and a syan & General 1.96 1.47 0.50	earl	0.86	0.84	0.50	i	:	ŀ	ı	
1.59 0.99 0.88 1.30 0.50 2.39 3.01 2.25 1.83 2.40 3.00 3.75 3.74 4.27 3.71 2.68 2.33 1.96 1.47 0.50 2.93 2.95 3.35 3.40 3.24 2.81 2.47 2.42 2.69 2.66 2.47 2.00	rovincial	1.68	1.03	2.42	3.30	4.00	3.00	2.00	
2.39 3.01 2.25 1.83 2.40 3.00 3.75 3.74 4.27 3.71 2.68 2.33 1.96 1.47 0.50 2.93 2.95 3.35 3.40 3.24 2.81 2.47 2.42 2.69 2.66 2.47 2.00	rudential	1.59	0.99	0.88	1.30	0.50	1	ì	
on 3.75 3.74 4.27 3.71 2.68 2.33 1.96 1.47 0.50 2.93 2.95 3.35 3.40 3.24 2.81 2.47 2.42 2.69 2.66 2.47 2.00	oval *	2.39	3.01	2.25	1.83	2.40	3.00	2.00	
1.96 1.47 0.50 2.93 2.95 3.35 3.40 3.24 2.81 2.47 2.42 2.69 2.66 2.47 2.00	un Alliance & London	3.75	3.74	4.27	3.71	2.68	2.33	2.00	
2.93 2.95 3.35 3.40 3.24 2.81 of 1990 data 2.47 2.42 2.69 2.66 2.47 2.00	Vesleyan & General	1.96	1.47	0.50	1	;	1	ł	
2.47 2.42 2.69 2.66 2.47 2.00	OTAL	2.93	2.95	3.35	3.40	3.24	2.81	2.00	
	OTAL of 1990 data	2.47	2.42	2.69	2.66	2.47	2.00	(14+)	

Risk Group :	MOTOR - COMP	MPREHENSIVE	VSIVE					Method :	Method : Company Incurred	ncurred
	Ċ	ć	•	RUN-OFF	PATTERN	RUN-OFF PATTERN PER MILLE		•	r	Ċ
Name	Size	٥	-	7	2	4	C	اه	,	8
Avon	94,483	622	226	33	30	22	83	13	10	တ
Britannic	23,622	632	225	38	31	22	တ	15	တ	10
Commercial Union	524,734	636	224	38	31	27	18	13	7	2
Co-operative	638,965	579	202	35	32	58	22	22	19	15
Comhill	454,893	909	225	43	36	23	24	13	တ	S
Eagle Star *	798,671	615	238	4	33	24	19	12	7	4
General Accident	1,261,494	617	235	34	53	23	18	17	10	Ŋ
Guardian Royal	1,032,911	604	242	43	35	25	2	12	9	4
Iron Trades Mutual *	266,398	620	225	36	31	24	20	5	12	ఐ
Legal & General	141,921	574	243	35	29	23	31	12	31	မ
London & Edinburgh	225,137	588	242	45	44	21	2	59	9	7
Nat. Farmers Union Mut.	_	265	217	37	98	78	25	18	18	10
Nat.Insurance & G'tee	358,044	909	244	38	30	26	8	13	=	4
Norman *	56,479	298	225	42	47	30	24	13	9	13
Norwich Union *	1,056,922	920	266	40	37	59	48	4	10	ဖ
Pearl	90,050	558	249	51	43	40	5 6	7	4	-
Provincial	330,901	617	233	38	33	23	16	4	0	9
Prudential	462,300	616	224	37	53	22	7	13	13	9
Royal *	852,520	609	232	42	35	28	17	16	O	9
Sun Alliance & London	1,157,936	809	231	39	32	21	12	9	13	7
Wesleyan & General	15,090	599	508	33	33	29	42	45	7	0
TOTAL	10,095,171	605	234	38	32	24	20	16	7	9
TOTAL of 1990 data	8,354,141	603	236	39	33	52	20	15	7	7
		* For thes	e compani	or these companies separate Comp data were available	Comp date	were avail	able			

Risk Group :	MOTOR - CO	COMPREHENSIVE	NSIVE		(Method : Co	Method : Company Incurred	nrred
	c	•	c	MEAN IEKWS	NIS.	ц	ď	7	α
Name	0	-	7	0	\$				
Avon	1.44	1.98	3.17	2.92	2.73	2.44	2.41	2.20	2.02
Britannic	1.36	1.85	2.96	2.86	2.84	2.81	2.32	2.31	2.13
Commercial Union	1.29	1.68	2.56	2.33	2.12	2.08	2.14	2.62	3.89
Co-operative	1.99	3.04	4.44	4.20	4.01	3.82	3.57	3.48	3.45
Comhill	1.49	2.02	3.04	2.92	2.91	2.77	3.11	3.29	3.52
Eagle Star *	1.34	1.68	2.58	2.38	2.22	2.08	2.05	2.03	1.86
General Accident	1.42	1.90	3.13	2.93	2.77	2.61	2.51	2.86	3.31
Guardian Royal	1.39	1.74	2.70	2.55	2.49	2.49	2.87	3.44	4.09
Iron Trades Mutual *	1.45	1.99	3.13	2.93	2.79	2.64	2.59	2.20	2.17
Legal & General	1.68	2.27	3.62	3.35	3.05	2.66	2.71	2.24	3.85
London & Edinburgh	1.41	1.72	2.46	2.17	2.06	1.60	1.18	1.93	2.68
Nat. Farmers Union Mut.	1.63	2.30	3.40	3.12	2.97	2.78	2.72	2.70	3.35
Nat.Insurance & G'tee	1.41	1.80	2.92	2.73	2.54	2.48	2.56	2.69	3.69
Norman *	1.44	1.83	2.52	2.14	2.01	1.79	1.68	1.37	0.69
Nowich Union *	1.47	1.75	2.78	2.51	2.36	2.31	2.09	1.93	1.85
Pearl	1.62	2.03	2.99	2.90	2.92	3.56	4.96	5.19	5.03
Provincial	1.41	1.89	3.04	2.89	2.90	2.90	2.86	3.15	3.73
Prudential	1.51	2.12	3.40	3.29	3.17	3.02	3.06	2.96	3.34
Royal *	1.39	1.77	2.64	2.40	2.22	2.13	1.86	1.89	1.95
Sun Alliance & London	1.53	2.14	3.48	3.41	3.44	3.32	3.09	3.17	3.59
Wesleyan & General	1.55	2.13	2.89	2.38	1.88	1.30	0.92	1.83	3.81
TOTAL	1.50	2.02	3.23	3.08	2.99	2.91	2.92	3.11	3.58
TOTAL of 1990 data	1.46	1.92	3.01	2.81	2.65	2.47	2.36	2.34	2.40
		* For these	companies	For these companies separate Comp data were available	omp data we	ere available			

Risk Group :	MOTOR	MOTOR - COMPREHENSIVE	NSIVE				Method : Company Incurred	Incurred
Name	σ	10	7	MEAN TER	MEAN TERMS (contd.) 12 13	4	15+	
Avon	2.06	4.57	6.00	5.00	4.00	3.00	2.00	
Britannic	2.89	3.40	4.79	5.00	4.00	3.00	2.00	
Commercial Union	4.76	5.82	5.41	4.71	4.15	3.15	2.00	
Co-operative	3.50	4.10	3.75	3.25	3.22	2.81	2.00	
Cornhill	3.56	3.27	2.00	4.58	3.75	2.77	2.00	
Eagle Star *	1.61	1.26	1.28	1.20	0.79	0.50	1	
General Accident	3.51	3.40	3.47	3.78	3.49	2.51	2.00	
Guardian Royal	4.92	4.88	4.86	4.43	3.60	3.00	2.00	
Iron Trades Mutual *	2.13	1.41	1.03	0.86	2.51	3.00	2.00	
Legal & General	4.12	4.43	5.85	5.10	4.11	3.00	2.00	
London & Edinburgh	3.05	3.34	5.20	4.81	3.81	3.00	2.00	
Nat. Farmers Union Mut.	4.35	5.30	4.50	5.00	4.00	3.00	2.00	
Nat.Insurance & G'tee	4.29	4.46	4.51	5.66	4.00	3.00	2.00	
Norman *	0.50	1	ł	ł	;	ì	1	
Norwich Union *	1.75	1.11	1.57	2.11	1.11	0.50	ı	
Pearl	4.22	4.39	3.77	5.00	4.00	3.00	2.00	
Provincial	4.50	4.42	4.58	3.85	3.30	3.00	2.00	
Prudential	3.39	3.02	3.44	3.86	3.15	3.00	2.00	
Royal *	2.37	2.99	2.29	1.97	2.70	3.00	2.00	
Sun Alliance & London	3.72	3.32	3.81	3.96	2.96	3.34	2.00	
Wesleyan & General	3.12	2.85	1.91	2.00	4.00	3.00	2.00	
TOTAL	3.83	3.87	4.03	3.89	3.48	2.81	2.00	
TOTAL of 1990 data	2.45	2.44	2.62	2.63	2.48	2.00	(14+)	
		* For these	companie	s separate Co	* For these companies separate Comp data were available	e available		

Risk Group :	MOTOR - NON COMPREHENSIVE	N COMP	REHENSIV	ш			Method :	nflation Ad	Method : Inflation Adjusted Chain Ladder	in Ladder
Future Inflation:	8.00%			RUN-OFF	RUN-OFF PATTERN PER MILLE	I PER MILI	щ			
Name	Size	0	•	7	က	4	ഹ	9	7	ω
Avon	17,430	361	211	83	84	42	45	51	66	19
Britannic	6,151	207	195	82	149	105	62	83	89	18
Commercial Union	44,204	279	261	142	120	88	69	25	52	2
Co-operative	112,678	239	228	118	107	79	72	23	53	13
Comhill	54,260	261	255	152	108	69	58	3 6	52	ဖ
Eagle Star *	144,997	232	247	132	122	8	65	56	21	10
General Accident	170,480	277	245	118	104	98	62	42	6	7
Guardian Royal	248,126	250	261	149	122	87	62	4	24	4
Iron Trades Mutual *	38,746	374	260	35	83	74	47	25	16	6
Legal & General	10,731	251	241	126	142	80	99	71	5	4
London & Edinburgh	184,727	316	277	120	105	83	4	50	28	7
Nat. Farmers Union Mut.	34,979	303	223	112	124	7	82	42	31	വ
Nat.Insurance & G'tee	125,596	292	272	114	102	9/	83	35	20	ဗ
Norman *	1,339	345	289	22	61	28	4	24	20	28
Norwich Union *	217,849	272	243	122	110	88	65	40	33	4
Pearl	15,355	210	227	181	411	156	4	39	78	0
Provincial	35,086	260	236	134	118	2	91	45	8	8
Prudential	57,523	301	241	114	4	11	53	78	48	9
Royal *	95,735	226	286	146	107	84	63	43	19	14
Sun Alliance & London	239,437	281	278	151	114	82	38	24	23	2
Wesleyan & General	2,527	228	152	88	53	91	7	301	20	-
TOTAL	1,857,956	271	257	129	110	83	62	43	32	5
TOTAL of 1990 data	1,467,678	275	259	131	110	98 :	62	42	14	æ
		707.170		***********		10: C+CT C	CHOLONIA			

* For these companies separate Non-Comp data were available

	α	ON COMP	- NON COMPREHENSIVE			Method: I	Method : Inflation Adjusted Chain Ladder
Future Inflation:	8.00%		RUN-OFF F	RUN-OFF PATTERN PER MILLE (Contd.)	ER MILLE (Contd.)	
Name	6	5	1	12	13	4	15+
Avon	က	-	0	0	0	0	0
Britannic	တ	4	9	0	0	0	
Commercial Union	_	0	0	0	0	0	,
Co-operative	7	4	7	æ	S.	7	3
Comhill	က	œ		0	0	0	ဇ
Fagle Star *	6.	ĸ	6	67	c	c	ıc
General Accident	? <) C	וכ	· •	o c	o c) 4
	† =	۷ -	N (- (> ()	(
Gualdian Adyan		-	>	>	>	∍	5
Iron Trades Mutual *	ဖ		ო	0	o	0	0
Legal & General	-	4	0	0	0	0	೯
London & Edinburgh	8	7	0	0	0	0	0
Nat. Farmers Union Mut.	ო	0	7-	0	0	0	0
Nat.Insurance & G'tee	-	0	0	0	0	0	0
Norman ★	4	53	7	13	0	0	0
Norwich Union *	7	ۍ.	_	-	0	0	0
Pearl	7	-	0	0	0	0	0
Provincial	_	m	0	0	c	· C	
Prudential	4	7	က	0	· ←	0	» o
Royal ⁴	10	8	0	0	0	0	0
Sun Alliance & London	-	-	0	0	0	0	0
Wesleyan & General	9		18	0	0	0	0
TOTAL	က	8	-	-	0	0	-
TOTAL of 1990 data	4	4	7		-	7	(14+)
	•	For these	* For these companies separate Non-Comp data were available	separate No	n-Comp dat	a were ava	ilable

Risk Group:	MOTOR - NO		N COMPREHENSIVE	111		Method : In	flation Adjus	Method: Inflation Adjusted Chain Ladder	adder
Future Inflation:	8.00%			MEAN TERMS	MS				
Name	0	_	7	ო	4	S	9	7	æ
Avon	2.72	2.98	3.20	2.84	2.59	1.99	1.37	0.74	0.73
Britannic	3.44	3.21	3.09	2.52	2.34	2.09	1.59	1.38	1.66
Commercial Union	2.40	2.14	2.06	1.76	1.52	1.30	1.16	0.74	1.56
Co-operative	3.15	2.99	3.05	2.78	2.57	2.29	2.11	2.10	3.06
Comhill	2.66	2.43	2.44	2.33	2.22	1.99	1.88	1.38	2.72
Eagle Star *	2.93	2.66	2.69	2.43	2.32	2.17	2.11	2.62	2.79
General Accident	2.68	2.52	2.55	2.21	1.91	1.74	1.50	1.24	1.92
Guardian Royal	2.54	2.22	2.13	1.85	1.60	1.32	1.06	0.82	1.18
Iron Trades Mutual *	2.19	2.19	2.40	2.04	1.82	1.74	1.71	1.57	1.44
Legal & General	2.71	2.44	2.36	1.98	1.85	1.53	1.26	2.65	3.38
London & Edinburgh	2.27	2.08	2.16	1.85	1.62	1.56	1.42	0.95	1.68
Nat. Farmers Union Mut.	2.58	2.48	2.41	2.00	1.78	1.32	1.16	0.87	1.09
Nat.insurance & G'tee	2.42	2.21	2.28	1.91	1.56	1.13	1.01	0.75	0.95
Norman *	2.87	3.12	4.19	4.19	4.17	3.70	2.95	2.31	2.13
Norwich Union *	2.71	2.53	2.55	2.24	1.99	1.78	1.62	1.35	1.32
Pearl	2.73	2.32	2.05	1.78	1.33	1.48	1.06	0.74	1.71
Provincial	2.71	2.48	2.41	2.10	1.85	1.37	1.24	96.0	1.25
Prudential	2.63	2.55	2.62	2.33	2.04	1.74	1.29	1.86	1.97
Royal *	2.66	2.29	2.34	2.13	1.86	1.62	1.43	1.32	0.95
Sun Alliance & London	2.31	2.01	1.97	1.74	1.54	1.50	1.27	0.95	2.14
Wesleyan & General	3.83	3.81	3.62	3.14	2.43	1.89	0.93	1.63	2.89
TOTAL	2.59	2.37	2.39	2.11	1.87	1.62	1.40	1.26	2.15
TOTAL of 1990 data	2.57	2.35	2.38	2.12	1.90	1.77	1.76	2.23	2.33
		* For these	companies	separate No	n-Comp da	For these companies separate Non-Comp data were available	able		

Risk Group :	MOTOR - N	- NON COMPREHENSIVE	EHENSIV			Method : In	Method: Inflation Adjusted Chain Ladder
Future Inflation :	8.00%			MEAN TER	MEAN TERMS (contd.)		
Name	O	10	7	12	13	14	15+
Avon	0.73	0.50	1	ţ	1	:	:
Britannic	1.38	0.78	0.50	1	i	i	ŧ
Commercial Union	1.87	2.06	1.99	2.06	6.95	5.95	2.00
Co-operative	3.11	2.94	2.46	1.66	1.72	2.07	2.00
Comhill	2.61	2.11	4.74	4.72	3.92	3.00	2.00
Eagle Star *	2.55	3.19	3.48	3.25	3.94	2.97	2.00
General Accident	1.87	1.84	1.63	2.61	3.90	3.00	2.00
Guardian Royal	1.33	1.06	0.91	1.31	0.50	i	i
Iron Trades Mutual *	1.25	1.22	0.50	1	ì	1	ı
Legal & General	3.69	3.29	5.86	5.31	4.33	3.00	2.00
London & Edinburgh	1.23	96.0	1.42	1.50	0.50	i	ı
Nat. Farmers Union Mut.	0.92	1.44	0.81	5.00	4.00	3.00	2.00
Nat.Insurance & G'tee	0.98	0.71	0.19	0.50	ł	:	:
Norman *	1.68	0.92	1.35	0.50	ł	;	1
Norwich Union *	1.18	0.86	0.82	0.50	ŀ	ŀ	ī
Pearl	0.86	0.84	0.50	;	1	:	:
Provincial	1.50	0.82	1.58	2.28	4.00	3.00	2.00
Prudential	1.59	0.99	0.88	1.30	0.50	i	I
Royal *	0.47	-0.68	4.60	3.63	2.28	3.00	2.00
Sun Alliance & London	2.94	2.88	3.50	3.03	2.00	1.80	2.00
Wesleyan & General	1.96	1.47	0.50	1	ł	i	1
TOTAL	2.26	2.14	2.41	2.50	2.60	2.57	2.00
TOTAL of 1990 data	2.47	2.42	2.69	2.66	2.47	2.00	(14+)
		* For these	companie	For these companies separate Non-Comp data were available	on-Comp da	ta were avai	lable

Risk Group :	MOTOR - NON COMPREHENSIVE	N COMPF	EHENSIN	w				Method:	Method : Basic Chain Ladder	n Ladder
				RUN-OFF	PAITERN	RUN-OFF PAITERN PER MILLE	Щ			
Name	Size	0	-	2	3	4	5	9	2	ထ
Avon	17,430	367	212	81	84	41	42	49	96	24
Britannic	6,151	210	199	86	149	107	65	77	63	8
Commercial Union	44,204	273	264	141	121	98	61	25	56	7
Co-operative	112,678	238	228	117	106	79	72	99	26	4
Cornhill	54,260	248	254	155	110	29	61	56	55	9
Eagle Star *	144,997	224	247	129	119	87	29	62	22	11
General Accident	170,480	275	247	117	103	94	9	42	41	ဆ
Guardian Royal	248,126	249	259	148	123	98	63	42	24	4
fron Trades Mutual *	38,746	383	258	95	. 88	71	46	26	16	တ
Legal & General	10,731	245	242	128	134	84	64	22	10	Ŋ
London & Edinburgh	184,727	312	276	121	105	85	44	20	28	8
Nat. Farmers Union Mut.	34,979	306	224	113	119	69	87	41	30	9
Nat.Insurance & G'tee	125,596	287	270	113	103	92	83	36	21	က
Norman *	1,339	322	285	83	62	35	16	24	41	33
Norwich Union *	217,849	264	243	120	109	88	29	42	37	15
Pearl	15,355	508	228	178	116	156	40	38	30	0
Provincial	35,086	258	237	132	116	70	93	46	32	6
Prudential	57,523	296	236	111	94	78	53	86	17	တ
Royal *	95,735	212	278	140	108	87	71	51	22	16
Sun Alliance & London	239,437	277	280	150	115	82	39	25	24	ო
Wesleyan & General	2,527	217	147	83	47	06	10	330	45	~
TOTAL	1,857,956	267	257	129	110	83	62	44	33	9
TOTAL of 1990 data	1,467,678	270	260	130	109	98	62	43	16	9
	-	* For these	e companie	s separate	Non-Com	or these companies separate Non-Comp data were available	available	Φ.		

Risk Group:	OTOR - N	MOTOR - NON COMPREHENSIVE	EHENSIVE	F) 		Method : Basic Chain Ladder
Name	G	10	KON-OFF PA	_	EKN PEK MILLE (CONTA). 12 13 14	conta.) 14	15+
Avon	4	-	0	0	0	0	0
Britannic	œ	12	S	0	0	0	0
Commercial Union	-	0	0	0	0	0	0
Co-operative	ω	4	2	7	4		3
Comhill	က	တ		0	0	-	3
Eagle Star *	15	S	7	ო	0	0	7
General Accident	9	7	က	-	0	-	4
Guardian Royal	- -	-	τ-	0	0	0	0
Iron Trades Mutual *	7		4	0	0	0	0
Legal & General	7	2	0	0	0	0	Q
London & Edinburgh	ო	7	0	0	0	0	0
Nat. Farmers Union Mut.	က	0	-	0	0	0	0
Nat.insurance & G'tee	-	0	0	0	0	0	0
Norman *	18	62	ന	17	0	0	0
Norwich Union *	7	ស	۳-	-	0	0	0
Pearl	ო	-	0	0	0	0	0
Provincial	- -	4	0	0	0	0	0
Prudential	5	10	4	0		0	0
Royal *	12	7	0	0	0	0	0
Sun Alliance & London	₩-	-	0	0	0	0	0
Wesleyan & General	7	-	21	0	0	0	0
TOTAL	ო	က	~	-	0	0	-
TOTAL of 1990 data	5	4	7	-	-	က	(14+)
		* For these	companies	separate No	* For these companies separate Non-Comp data were available	a were av	railable

Risk Group:	MOTOR - I	MOTOR - NON COMPREHENSIVE	REHENSIVE				Method: Ba	Method : Basic Chain Ladder	adder
•				MEAN TERMS	IMS				
Name	0	~	8	ო	4	ß	9	7	ω
Avon	2.70	2.97	3.22	2.87	2.64	2.04	1.42	0.78	0.71
Britannic	3.38	3.15	3.04	2.47	2.29	2.05	1.59	1.37	1.56
Commercial Union	2.42	2.14	2.08	1.77	1.53	1.30	1.21	0.80	1.73
Co-operative	3.16	3.00	3.06	2.78	2.56	2.26	2.04	1.97	2.87
Cornhill	2.76	2.50	2.53	2.44	2.36	2.10	2.04	1.55	2.96
Eagle Star *	3.03	2.76	2.81	2.55	2.41	2.27	2.19	2.79	2.92
General Accident	2.71	2.55	2.60	2.29	2.00	1.85	1.63	1.41	2.14
Guardian Royal	2.56	2.24	2.16	1.87	1.63	1.36	1.10	06.0	1.23
Iron Trades Mutual	2.17	2.21	2.44	2.10	1.89	1.80	1.75	1.63	1.46
Legal & General	2.78	2.52	2.48	2.14	2.01	1.77	1.57	3.44	4.04
London & Edinburgh	2.28	2.09	2.16	1.85	1.62	1.57	1.43	96.0	1.62
Nat. Farmers Union Mut.	2.56	2.47	2.42	2.03	1.79	1.32	1.20	0.91	1.11
Nat.Insurance & G'tee	2.46	2.25	2.31	1.94	1.59	1.13	1.03	0.77	0.95
Norman *	3.06	3.28	4.29	4.30	4.26	3.88	3.16	2.53	2.16
Norwich Union *	2.77	2.58	2.61	2.29	2.03	1.80	1.59	1.30	1.31
Pearl	2.74	2.33	2.07	1.80	1.36	1.55	1.13	0.82	1.71
Provincial	2.73	2.50	2.45	2.14	1.88	1.40	1.28	1.05	1.25
Prudential	2.73	2.67	2.75	2.46	2.16	1.85	1.40	2.05	1.98
Royal *	2.80	2.42	2.46	2.21	1.92	1.63	1.40	1.30	0.91
Sun Alliance & London	2.33	2.02	1.99	1.74	1.55	1.51	1.25	0.88	1.61
Wesleyan & General	3.97	3.94	3.73	3.22	2.47	1.90	0.93	1.85	2.85
TOTAL	2.63	2.41	2.44	2.16	1.92	1.68	1.48	1.37	2.21
TOTAL of 1990 data	2.62	2.40	2.45	2.19	1.99	1.86	1.86	2.25	2.37
		* For these	For these companies separate Non-Comp data were available	separate No	on-Comp dat	a were avai	lable		

Risk Group :	MOTOR -	MOTOR - NON COMPREHENSIVE	REHENSIVE				Method : Basic Chain Ladder
:	,			MEAN TER	MEAN TERMS (contd.)		
Name	6	10	11	12	13	14	15+
Avon	0.74	0.50	ŀ	ŧ	ł	;	•
Britannic	1.37	0.79	0.50	ŧ	:	1	Ţ
Commercial Union	2.22	2.53	2.49	2.74	4.56	3.56	2.00
Co-operative	2.94	2.89	2.49	1.74	1.92	2.49	2.00
Cornhill	2.85	2.31	4.58	4.30	3.42	2.47	2.00
Eagle Star *	2.70	3.48	3.76	3.47	3.94	2.97	2.00
General Accident	2.15	2.23	2.02	2.54	2.46	1.49	2.00
Guardian Royal	1.38	1.06	0.87	1.32	0.50	1	
Iron Trades Mutual *	1.24	1.24	0.50	ŧ	ì	ł	1
Legal & General	4.40	3.97	5.90	5.22	4.24	3.00	2.00
London & Edinburgh	1.16	0.88	1.27	1.50	0.50	;	;
Nat. Farmers Union Mut.	0.97	1.44	0.77	5.00	4.00	3.00	2.00
Nat.Insurance & G'tee	0.95	0.69	0.22	0.50	ł	1	1
Norman *	1.70	96.0	1.36	0.50	1	1	ï
Norwich Union *	1.21	0.90	0.89	0.50	ı	ì	ı
Pearl	0.83	0.83	0.50	ŀ	i	ŀ	ı
Provincial	1.50	0.80	1.41	1.88	4.00	3.00	2.00
Prudential	1.62	0.99	96.0	1.32	0.50	;	ı
Royal *	0.38	-1.56	4.76	3.76	2.48	3.00	2.00
Sun Alliance & London	2.22	2.11	3.18	3.18	2.10	7.48	2.00
Wesleyan & General	1.96	1.47	0.50	i	:	1	ı
TOTAL	2.34	2.24	2.54	2.60	2.56	2.37	2.00
TOTAL of 1990 data	2.50	2.47	2.75	2.71	2.47	2.00	(14+)
		* For these	companies	separate No	For these companies separate Non-Comp data were available	a were av	ailable

Risk Group:	MOTOR - NON		COMPREHENSIVE	u.i				Method : A	Method : Average Claim	E
Future Inflation:	8.00%			RUN-OFF	PATTERN	RUN-OFF PATTERN PER MILLE	115			
Name	Size	0	~	7	ო	4	5	9	7	æ
Avon	17,430	304	192	98	84	42	57		127	33
Britannic	6,151	216	194	84	142	100	28	77	65	25
Commercial Union	44,204	289	265	140	117	80	56	22	23	4
Co-operative	112,678	247	222	113	66	74	99	54	51	20
Cornhill	54,260	267	258	149	102	<i>L</i> 9	20	24	46	တ
Eagle Star *	144,997	249	244	131	117	80	63	26	2	o
General Accident	170,480	284	241	113	66	91	58	45	39	13
Guardian Royal	248,126	248	263	147	118	84	22	43	28	7
Iron Trades Mutual *	38,746	356	260	85	94	87	54	20	20	æ
Legal & General	10,731	253	241	126	125	82	61	72	6	7
London & Edinburgh	184,727	327	273	115	102	79	43	20	27	\$
Nat. Farmers Union Mut.	34,979	271	216	108	130	73	98	51	4	7
Nat.Insurance & G'tee	125,596	307	273	114	26	74	7.4	33	9	7
Norman *	1,339	318	300	84	99	39	19	21	9	25
Norwich Union *	217,849	291	247	123	109	84	90	34	28	12
Pearl	15,355	207	221	182	113	158	40	30	33	***
Provincial	35,086	269	243	124	108	69	84	42	35	16
Prudential	57,523	306	238	112	94	74	51	74	17	10
Royal *	95,735	232	569	144	107	88	69	45	50	16
Sun Alliance & London	239,437	297	569	147	109	84	38	24	23	5
Wesleyan & General	2,527	219	142	25	52	81	თ	333	54	~
TOTAL	1,857,956	280	252	126	106	80	29	4	31	10
TOTAL of 1990 data	1,467,678	271	247	127	106	83	29	40	56	16
		For these	or these companies	s separate	Non-Com	separate Non-Comp data were	available			

Risk Group:	MOTOR - NO	N COMF	TOR - NON COMPREHENSIVE				Method : Average Claim
Future Inflation:	8.00%		RUN-OFF P	ATTERN P	RUN-OFF PATTERN PER MILLE (Contd.)	Contd.)	
Name	6	9		12	1 3	14	15+
Avon	9	7	0	0	0	0	0
Britannic	12	6	ဆ	0	0	0	0
Commercial Union	4 -	τ-	0	0	0	0	*
Co-operative	12	7	က	13	ထ	က	
Combill	4	13	-	0	0	0	7
Eagle Star *	13	ß	က	ო	0	0	9
General Accident	ထ	4	4	-	0	0	က
Guardian Royal	7	₩.	-	0	0	0	0
Iron Trades Mutual *	က	0	4	0	0	0	0
Legal & General	7	7	0	0	.	0	15
London & Edinburgh	หว	4	-	0	-	0	0
Nat. Farmers Union Mut.		_	-	0	0	0	0
Nat.Insurance & G'tee		-	0	0	0	0	0
Norman *	12	45	7	5	0	0	0
Norwich Union *	g	4		0	0	0	0
Pearl	4	-	0	0	0	0	0
Provincial	7	9	4	0	0	0	0
Prudential	ထ	1	ഹ	0	τ-	0	0
Royal *	10	7	0	0	0	0	0
Sun Alliance & London	****	-	0	0		0	
Wesleyan & General	7	~~	20	0	0	0	0
TOTAL	ß	4	7	*	₩-	0	8
TOTAL of 1990 data	ထ	7	೮	8	-	4	(14+)
	*	For thes	* For these companies	separate	Non-Comp dat	a were available	ailable

Risk Group :	MOTOR - NO	NON COMPI	N COMPREHENSIVE				Method : A	Method: Average Claim	_
Future Inflation:	8.00%			MEAN TERMS	SWS				
Name	0	-	2	3	4	5	ဖ	7	œ
Avon	3.20	3.38	3.47	3.08	2.73	2.05	1.43	08.0	0.73
Britannic	3.48	3.30	3.22	2.67	2.52	2.29	1.79	1.57	1.66
Commercial Union	2.37	2.12	2.09	1.81	1.62	1.45	1.44	1.11	1.98
Co-operative	3.38	3.33	3.51	3.32	3.19	3.00	2.91	2.94	3.58
Cornhill	2.77	2.60	2.73	2.75	2.77	2.75	2.80	2.45	3.79
Eagle Star *	2.88	2.67	2.72	2.49	2.38	2.22	2.15	2.69	2.89
General Accident	2.77	2.67	2.77	2.47	2.21	2.12	1.94	1.79	2.30
Guardian Royal	2.59	2.28	2.24	1.98	1.76	1.51	1.22	1.00	1.18
Iron Trades Mutual *	2.26	2.23	2.41	2.01	1.72	1.67	1.77	1.44	1.55
Legal & General	2.88	2.69	2.73	2.48	2.45	2.37	2.39	4.77	4.95
London & Edinburgh	2.28	2.14	2.26	1.97	1.80	1.78	1.69	1.26	1.68
Nat. Farmers Union Mut.	2.84	2.71	2.64	2.21	2.03	1.58	1.40	1.11	1.13
Nat.Insurance & G'tee	2.37	2.20	2.30	1.97	1.65	1.27	1.21	1.02	0.95
Norman *	2.86	2.96	3.88	3.84	3.79	3.45	2.77	2.08	2.08
Norwich Union *	2.57	2.42	2.45	2.15	1.93	1.75	1.62	1.34	1.32
Peari	2.78	2.38	2.10	1.85	1.40	1.60	1.17	0.85	1.71
Provincial	2.74	2.56	2.59	2.30	2.06	1.63	1.55	1.29	1.33
Prudential	2.67	2.63	2.75	2.48	2.23	1.96	1.56	2.13	1.97
Royal *	2.71	2.38	2.39	2.15	1.86	1.60	1.42	1.32	0.91
Sun Alliance & London	2.32	2.08	2.07	1.87	1.70	1.77	1.63	1.45	2.71
Wesleyan & General	4.01	3.99	3.76	3.24	2.52	1.90	0.93	1.67	2.89
TOTAL	2.66	2.50	2.57	2.33	2.16	2.00	1.91	1.93	2.65
TOTAL of 1990 data	2.78	2.62	2.70	2.49	2.33	2.24	2.20	2.23	2.33
		* For these	companies	For these companies separate Non-Comp data were available	on-Comp dat	a were avai	lable		

Risk Group :	MOTOR - N	MOTOR - NON COMPREHENSIVE	REHENSIVE				Method: Average Claim
Future Inflation:	8.00%			MEAN TER	MEAN TERMS (contd.)		
Name	O	10	11	12	5	4	15+
Avon	0.73	0.50	1	:	:	:	-
Britannic	1.38	0.78	0.50	ï	:	ï	:
Commercial Union	2.59	3.06	3.15	3.26	4.68	3.68	2.00
Co-operative	3.69	3.55	3.08	2.30	2.43	2.52	2.00
Comhill	3.81	3.38	5.42	4.88	3.97	3.00	2.00
Eagle Star *	2.65	3.24	3.41	3.27	3.95	2.97	2.00
General Accident	2.40	2.56	2.53	3.60	3.96	3.00	2.00
Guardian Royal	1.33	1.06	0.91	1.31	0.50	ı	ŀ
Iron Trades Mutual	1.55	1.16	0.50	ŀ	;	1	1
Legal & General	5.24	4.78	5.94	5.12	4.12	3.00	2.00
London & Edinburgh	1.23	0.96	1.42	1.50	0.50	ŀ	ŧ
Nat. Farmers Union Mut.	1.02	1.76	1.22	2.00	4.00	3.00	2.00
Nat.Insurance & G'tee	0.98	0.71	0.19	0.50	:	:	ł
Norman *	1.64	0.88	1.34	0.50	:	;	1
Norwich Union *	1.15	0.84	0.77	0.50	;	:	ı
Pearl	0.86	0.84	0.50	ı	ı	ŀ	1
Provincial	1.68	1.03	2.42	3.30	4.00	3.00	2.00
Prudential	1.59	0.99	0.88	1.30	0.50	i	:
Royai *	0.47	-0.69	5.06	4.02	2.31	3.00	2.00
Sun Alliance & London	3.75	3.74	4.27	3.71	2.68	2.33	2.00
Wesleyan & General	1.96	1.47	0.50	ı	i	ŀ	1
TOTAL	2.93	2.95	3.35	3.40	3.24	2.81	2.00
TOTAL of 1990 data	2.47	2.42	2.69	2.66	2.47	2.00	(14+)
		* For these	companies	separate No	* For these companies separate Non-Comp data were available	a were ava	ilable

Risk Group:	MOTOR - NON COMPREHENSIVE	N COMPF	REHENSIVI	ш				Method : C	Method: Company Incurred	ncurred
				RUN-OFF	RUN-OFF PATTERN PER MILLE	PER MILL	щ			
Name	Size	0	•	7	က	4	5	9	7	8
Avon	17,430	387	224	87	82	40	45	36	47	32
Britannic	6,151	256	224	95	113	95	63	56	41	25
Commercial Union	44,204	268	244	135	122	6	64	29	56	7
Co-operative	112,678	229	206	107	95	29	61	51	48	39
Cornhill	54,260	248	246	148	110	92	58	28	34	-
Eagle Star*	144,997	242	237	131	120	82	65	9	24	#
General Accident	170,480	288	240	110	9	83	53	36	38	22
Guardian Royal	248,126	249	261	145	113	82	52	34	21	17
Iron Trades Mutual *	38,746	320	239	94	25	9	28	25	37	15
Legal & General	10,731	256	244	126	125	82	55	56	24	10
London & Edinburgh	184,727	320	264	111	66	80	44	20	29	∞
Nat. Farmers Union Mut.	34,979	314	235	117	117	64	72	39	20	G
Nat.Insurance & G'tee	125,596	281	253	107	9	68	29	34	40	19
Norman *	1,339	336	279	82	72	45	77	17	22	17
Norwich Union *	217,849	260	223	117	109	95	72	45	38	21
Pearl	15,355	203	209	166	109	155	45	43	24	S
Provincial	35,086	268	240	125	112	69	9/	40	30	13
Prudential	57,523	298	232	109	91	72	49	63	54	24
Royal *	95,735	239	266	141	101	84	99	47	21	16
Sun Alliance & London	239,437	281	260	142	106	98	39	27	23	11
Wesleyan & General	2,527	310	196	107	69	92	9	184	46	ß
TOTAL	1,857,956	268	242	121	102	78	59	41	33	18
TOTAL of 1990 data	1,467,678	265	244		103	8	20	44	31	20
		* For thes	or these companies		separate Non-Comp data were available	p data wer	e available			

Risk Group:	NOTOR - I	MOTOR - NON COMPREHENSIVE	REHENSIVE				Method : Company Incurred
;			RUN-OFF PAT		TERN PER MILLE (Contd.)	Contd.)	
Name	6	10	11	12	13	14	15+
Avon	12	2	0	0	0	0	
Britannic	9	10	ო	0	0	O	
Commercial Union	က	τ-	0	-	0	0	œ
Co-operative	33	O	æ	14	_	, c)	27
Cornhill	ھ	15	7	0	0	-	13
Eagle Star *	5	ဖ	8	m	c	c	~
General Accident	æ	တ		, ct) C	, c	, ,
Guardian Royal	သ	4	. 🛨) C) -	1 C	2 0
Iron Trades Mutual *	7	9	. -) C	- c	>	2 c
Legal & General	4	တ	; 	0	0	0	ാത
London & Edinburah	œ	σ	•	c	c	c	Q
Nat. Farmers Union Mut	4	· c	۰ ،	o c	.	> 0	0 1
Nat.Insurance & G'ee	. 0	~	> ∝	ر د د	>	> c	ດ ້ຳ
Norman *	: ω	. 52	· 	1 6	o c) (7.0
Norwich Union *	12	7	က	· ~	0	0	2 0
Pearl	œ	٣	Ç	c	c	¢	•
Provincial	, (7 0	2 +) t	> (> (<u>ත</u> :
Dudential	,	· ¢	- (- ,	N (>	11
Boyel *	o Ç	2 .	٥ ٥	- (י נא	0	æ
	<u>y</u> .	n ·	>	0	0	0	0
Sun Alliance & London	4	ဖ	ო	0	4	7	æ
Wesleyan & General	2	0	ъ	0	0	0	4
TOTAL	9	ω	4	ო	₩	τ	5
TOTAL of 1990 data		ω	4	ო	-	5	(14+)
		* For these	companies :	* For these companies separate Non-Comp data were available	n-Comp data	a were ava	ilable

Risk Group :	MOTOR	MOTOR - NON COMPREHENSIVE	ZEHENSIVE	CANCIT INV TAR	0		Method	Company Incurred	ırred
Name	0	-	8	3 1 5	4	വ		7	8
Avon	2.57	2.87	3.24	3.03	2.97	2.51	2.18	1.78	1.95
Britannic	3.17	3.08	3.20	2.80	2.64	2.54	2.37	2.41	2.73
Commercial Union	2.67	2.47	2.45	2.19	2.08	2.09	2.39	2.50	3.68
Co-operative	3.95	3.97	4.23	4.09	3.99	3.77	3.61	3.44	3.44
Comhill	2.95	2.75	2.85	2.83	2.87	2.93	3.18	3.07	3.77
Eagle Star *	2.91	2.68	2.67	2.40	2.25	2.03	1.85	2.19	2.29
General Accident	2.98	2.98	3.24	3.07	2.93	2.99	2.96	2.83	3.24
Guardian Royal	2.78	2.53	2.61	2.50	2.48	2.56	2.73	2.99	3.33
Iron Trades Mutual *	2.64	2.65	2.82	2.45	2.21	2.18	2.15	1.69	1.80
Legal & General	2.83	2.63	2.68	2.41	2.37	2.28	2.14	2.78	3.45
London & Edinburgh	2.49	2.43	2.65	2.44	2.38	2.58	2.69	2.39	3.08
Nat. Farmers Union Mut.	2.55	2.48	2.52	2.22	2.15	1.83	2.00	2.41	3.19
Nat.Insurance & G'tee	2.99	2.96	3.30	3.13	3.03	2.89	3.10	3.00	3.71
Norman *	2.96	3.20	4.16	4.20	4.36	4.32	3.84	3.23	4.01
Norwich Union *	2.96	2.83	2.83	2.51	2.26	2.06	1.94	1.64	1.52
Pearl	3.21	2.91	2.76	2.66	2.41	3.27	3.39	4.15	5.07
Provincial	2.88	2.75	2.85	2.64	2.59	2.37	2.65	2.89	3.70
Prudential	2.92	2,95	3.16	2.97	2.80	2.65	2.36	2.75	2.65
Royal *	2.74	2.44	2.48	2.28	1.99	1.74	1.55	1.47	1.11
Sun Alliance & London	2.62	2.45	2.55	2.47	2.46	2.82	2.89	2.97	3.60
Wesleyan & General	3.02	3.16	3.21	2.96	2.41	1.98	1.02	1.55	3.57
TOTAL	2.99	2.91	3.09	2.94	2.88	2.85	2.91	3.01	3.43
TOTAL of 1990 data	2.90	2.77	2.90	2.69	2.54	2.43	2.32	2.28	2.35
		* For these	companies	For these companies separate Non-Comp data were available	on-Comp da	la were ava	ilable		

Risk Group :	MOTOR - I	MOTOR - NON COMPREHENSIVE	REHENSIVE				Method: Company Incurred
				MEAN TER	MEAN TERMS (contd.)		
Name	တ	9	11	12	13	14	15+
Avon	3.20	5.75	6.00	5.00	4.00	3.00	2.00
Britannic	3.38	3.58	4.90	5.00	4.00	3.00	2.00
Commercial Union	5.35	90.9	5.54	4.78	4.11	3.11	2.00
Co-operative	3.57	4.05	3.60	3.11	3.14	2.79	2.00
Comhill	3.66	3.46	5.17	4.66	3.80	2.82	2.00
Eagle Star *	2.00	2.41	2.81	2.87	3.95	2.98	2.00
General Accident	3.70	3.53	3.69	3.92	3.57	2.58	2.00
Guardian Royal	4.54	4.74	4.91	4.46	3.61	3.00	2.00
Iron Trades Mutual *	1.63	1.14	0.50	i	ŀ	1	Ĭ
Legal & General	3.83	3.57	5.75	5.17	4.18	3.00	2.00
London & Edinburgh	2.89	3.11	5.22	4.81	3.81	3.00	2.00
Nat. Farmers Union Mut.	4.14	5.01	4.19	5.00	4.00	3.00	2.00
Nat.Insurance & G'tee	4.20	4.39	4.47	5.69	4.00	3.00	2.00
Norman *	3.87	3.27	4.14	3.27	2.80	2.38	2.00
Norwich Union *	1.29	0.90	0.89	0.66	2.80	2.38	2.00
Pearl	4.66	4.63	4.10	5.00	4.00	3.00	2.00
Provincial	4.30	4.14	4.77	4.01	3.41	3.00	2.00
Prudential	3.03	2.88	3.34	3.79	3.10	3.00	2.00
Royal *	69.0	0.19	5.60	4.38	2.58	3.00	2.00
Sun Alliance & London	4.00	3.65	3.99	4.07	3.07	3.29	2.00
Wesleyan & General	4.18	3.94	3.01	5.00	4.00	3.00	2.00
TOTAL	3.81	3.88	4.04	3.90	3.49	2.81	2.00
TOTAL of 1990 data	2.47	2.44	2.62	2.63	2.48	2.00	(14+)
		* For these	companies	separate No	For these companies separate Non-Comp data were available	a were ava	ailable

WEIGHTED MEAN TERMS (USING OUTSTANDING PROPORTIONS ON RUN-OFF PATTERN AS WEIGHTS)

FIRE

Risk Group:

. Another veice	=======================================								
		ME	METHOD						
	%8		%8						
Name	IACL	BCL	AVC	ប					
Avon	1.96	1.85	2.10		SENSITIVITY	ANALYSIS	OF AGGRE	SENSITIVITY ANALYSIS OF AGGREGATE DATA	
Britannic	0.74	0.76	0.73						
Commercial Union	1.12	1.08	1.10			WEIGHTE	WEIGHTED MEAN TERM	E S	
Co-operative	0.95	0.95	0.94						
Comhill	1.55	1.53	1.48		BY ASSUI	BY ASSUMED MEAN TERM FOR TAIL	TERM FOF	I TAIL	
Eagle Star	1.37	1.31	1.30						
Ecclesiastical	2.73	2.54	2.47		Risk Group:	FIRE			
Economic	2.04	1.93	1.65		•				
General Accident	1.03	1.01	1.03		Assumed				
Guardian Royal	1.23	1.19	1.17		Mean Term	8%		8%	
					for tail	IACL	BCL	AVC	ਹ
Iron Trades Mutual	69.0	69.0	0.71		-	1.25	1.21	1.22	1.66
Legal & General	-1.69	-1.53	-0.18		2	1.30	1.25	1.26	1.78
Minster	0.81	0.80	0.75		က	1.35	1.29	1.31	1.91
Municipal General	0.71	0.70	0.76		4	1.39	1.33	1.35	2.04
Municipal Mutual	1.60	1,57	1.58						
Nat. Farmers Union Mutual	0.65	0.62	0.59						
Norwich Union	0.87	0.87	0.83						
Provincial	1.91	1.80	1.94						
Prudential	1.39	1.32	1.26						
Refuge	0.88	0.91	0.84						
Royal	0.53	0.54	0.61						
Sun Alliance & London	1.30	1.25	1.25						
Wesleyan & General	1.61	1.54	1.38						
TOTAL	1.30	1.25	1.26	1.78					
TOTAL based on 1990 data	1.32	1.30	1.30	3.72					

WEIGHTED MEAN TERMS (USING OUTSTANDING PROPORTIONS ON RUN-OFF PATTERN AS WEIGHTS)

Risk Group .	EMPI OVE	OYFRS LIABILITY	Ĕ						
. 200			METHOD						
	8%		%						
Name	IACI.	BCL.	AVC	ਹ					
Avon	2.76	2.91	2.64	2.91	SENSITIVITY ANALYSIS OF AGGREGATE DATA	ANALYSIS	OF AGGREO	SATE DATA	
Commercial Union	2.26	2.33	2.36	2.47					
Co-operative	3.67	3.80	3.93	3.79	WEIGH	WEIGHTED MEAN TERM	TERM		
Cornhill	3.64	3.85	3.45	5.39					
Eagle Star	4.44	4.65	4.45	4.44	BY ASSUN	IED MEAN	BY ASSUMED MEAN TERM FOR TAIL	LAIL.	
General Accident	3.92	4.15	3.57	3.92	Risk Group:	EMPLOYE	EMPLOYERS LIABILITY	.	
Guardian Royal	3.51	3.67	3.32	3.33					
Iron Trades Mutual	3.28	3.43	3.37	3.89					
Iron Trades Employer	2.94	3.08	3.00	3.06	Assumed				
Legal & General	4.26	4.43	4.17	3.91	Mean term	%8		8%	
)					for tail	ACL	BC L	AVC	ರ
Norwich Union	5.18	5.49	5.17	5.27		4.08	4.29	4.06	4.21
Orion	2.64	2.65	2.75	2.63	8	4.34	4.58	4.32	4.49
Pearl	3.11	3.21	2.95	3.40	က	4.60	4.86	4.57	4.77
Provincial	3.13	3.25	3.09	3.37	4	4.86	5.15	4.82	5.05
Prudential	2.76	2.85	2.68	2.97					
Royal	7.46	7.74	7.49	7.26					
Sun Alliance & London	6.91	7.25	6.18	6.92					
Wesleyan & General	8.40	8.72	6.77	3.68					
TOTAL	4.34	4.58	4.32	4.49					
TOTAL of 1990 data	4.38	4.64	4.36	4.65					

WEIGHTED MEAN TERMS (USING OUTSTANDING PROPORTIONS ON RUN-OFF PATTERN AS WEIGHTS)

Risk Group:	MOTOR - (- COMPREHENSIVE	NSIVE						
		METHOD							
	8%		8%						
Name	IACL	고 B	AVC	ರ					
Avcn	1.62	1.64	1.80	2.47	SENSITIVITY ANALYSIS OF AGGREGATE DATA	ANALYSIS	OF AGGRE	GATE DAT	K
Britannic	2.17	2.19	2.27	2.39					
Commercial Union	1.65	1.66	1.75	2.10		WEIGHTE	WEIGHTED MEAN TERM	RM	
Co-operative	2.43	2.41	2.91	3.66					
Cornhill	1.91	1.97	2.50	2.64	BY ASSUN	BY ASSUMED MEAN TERM FOR TAIL	TERM FOF	TAIL	
Eagle Star *	1.89	1.96	1.94	2.01	Risk Group: MOTOR - COMPREHENSIVE	MOTOR - (COMPREHI	ENSIVE	
General Accident	1.94	1.99	2.19	2.50	•				
Guardian Royal	1.55	1.58	1.61	2.32					
Iron Trades Mutual *	2.34	2.46	2.26	2.44	Assumed				
Legal & General	2.35	2.57	3.04	2.88	Mean term	8%		8%	
					for tail	IACL	BCL	AVC	ប
London & Edinburgh	1.94	1.91	2.03	1.94	~	1.85	1.89	2.07	2.63
Nat. Farmers Union Mut.	1.93	1.95	2.06	2.85	7	1.85	1.90	2.08	2.70
Nat.insurance & G'tee	1.69	1.71	1.73	2.38	က	1.86	1.90	2.09	2.76
Norman *	1.65	1.67	1.67	1.98	4	1.86	1.91	2.10	2.83
Norwich Union *	1.93	2.03	1.85	2.12					
Pearl	1.53	1.53	1.60	2.84					
Provincial	1.89	1.94	1.97	2.56					
Prudential	1.99	2.06	2.16	2.80					
Royal *	2.07	2.09	2.00	5.09					
Sun Alliance & London	1.79	1.81	1.93	2.91					
Wesleyan & General	2.34	2.37	2.43	2.15					
TOTAL TOTAL of 1990 data	1.85	1.90	2.08	2.70	* For these companies separate Comp data were available	npanies sep	arate Comp	data were a	wailable

WEIGHTED MEAN TERMS (USING OUTSTANDING PROPORTIONS ON RUN-OFF PATTERN AS WEIGHTS)

Risk Group:	MOTOR -	NON COMPREHENSIVE	EHENSIVE						
		METHOD							
	% 8		% 8						
Name	IACL	BCL	AVC	ರ					
Avon	2.58	2.59	2.74	2.86	SENSITIVITY ANALYSIS OF AGGREGATE DATA	ANALYSIS	OF AGGRE	GATE DATA	
Britannic	2.61	2.58	2.72	2.91					
Commercial Union	1.89	1.90	1.94	2.42		WEIGHTE	WEIGHTED MEAN TERM	RM	
Co-operative	2.76	2.74	3.26	3.87					
Cornhill	2.32	2.42	2.76	2.92	BY ASSUN	BY ASSUMED MEAN TERM FOR TAIL	TERM FOR	TAIL	
Eagle Star *	2.54	2.65	2.58	2.47	Risk Group:	MOTOR - N	NON COMP	MOTOR - NON COMPREHENSIVE	***
General Accident	2.25	2.32	2.49	3.06					
Guardian Royal	1.95	1.97	2.04	2.64					
fron Trades Mutual *	2.09	2.13	2.09	2.46	Assumed				
Legal & General	2.19	2.35	2.75	2.59	Mean Term	%8		8%	
ı					for tail	IACL	BC BC	AVC	ರ
London & Edinburgh	1.94	1.94	2.04	2.54	-	2.15	2.20	2.37	2.92
Nat. Farmers Union Mut.	2.11	2.12	2.30	2.39	7	2.16	2.20	2.39	3.00
Nat.Insurance & G'tee	1.96	1.98	1.99	3.15	ო	2.16	2.21	2.40	3.07
Norman *	3.31	3.42	3.13	3.76	4	2.17	2.21	2.41	3.15
Norwich Union *	2.27	2.30	2.20	2.50					
Pearl	1.93	1.95	1.98	2.97					
Provincial	2.14	2.17	2.29	2.77					
Prudential	2.30	2.40	2.42	2.91					
Royal *	2.10	2.17	2.14	2.22					
Sun Alliance & London	1.85	1.86	1.98	2.60					
Wesleyan & General	2.82	2.87	2.88	2.68					
	:								
TOTAL	2.16	2.20	2.39	3.00	1	•	;		
TOTAL of 1990 data	2.21	2.27	2.52	2.67	* For these companies separate Non-Comp data were available	npanies sepa	arate Non-C	omp data w	ere available