

RITC

TRADITIONAL METHODS

G.I. Convention 1990
Ken Larner

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GIRO
As At 31 December 1989
Sterling
Reported Premium

Reported Premium (In Thousands) - Evaluations in Years								
Underwriting Year	1	2	3	4	5	6	7	8
1975	67.957	116.886	134.236	134.236	134.236	134.236	134.236	134.236
1976	81.548	146.787	169.137	169.137	169.137	169.137	169.137	169.137
1977	108.731	163.097	187.931	187.931	187.931	187.931	187.931	187.931
1978	78.830	119.604	144.975	144.975	144.975	144.975	144.975	144.975
1979	97.858	165.815	177.192	177.192	177.192	177.192	177.192	177.192
1980	103.295	176.688	214.778	214.778	214.778	214.778	214.778	214.778
1981	95.140	195.716	246.995	246.995	246.995	246.995	246.995	246.995
1982	100.576	182.125	225.517	225.517	225.517	225.517	225.517	225.517
1983	135.914	217.462	252.364	252.364	252.364	252.364	252.364	
1984	184.843	301.729	346.329	346.329	346.329	346.329		
1985	190.280	304.448	357.068	357.068				
1986	342.504	470.263	518.152	518.152				
1987	353.377	551.811	612.117					
1988	459.390	638.796						
1989	445.798							

Reported Loss Report to Report Development Factors - Evaluations in Years								
Underwriting Year	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9
1975	1.720	1.148	1.000	1.000	1.000	1.000	1.000	1.000
1976	1.800	1.152	1.000	1.000	1.000	1.000	1.000	1.000
1977	1.500	1.152	1.000	1.000	1.000	1.000	1.000	1.000
1978	1.517	1.212	1.000	1.000	1.000	1.000	1.000	1.000
1979	1.694	1.069	1.000	1.000	1.000	1.000	1.000	1.000
1980	1.711	1.216	1.000	1.000	1.000	1.000	1.000	1.000
1981	2.057	1.262	1.000	1.000	1.000	1.000	1.000	1.000
1982	1.811	1.238	1.000	1.000	1.000	1.000	1.000	
1983	1.600	1.160	1.000	1.000	1.000	1.000		
1984	1.632	1.148	1.000	1.000	1.000			
1985	1.600	1.173	1.000	1.000				
1986	1.373	1.102	1.000					
1987	1.562	1.109						
1988	1.391							
1989								
Simple Average of Latest 3:								
	1.442	1.128	1.000	1.000	1.000	1.000	1.000	1.000
Simple Average of Latest 5:								
	1.511	1.138	1.000	1.000	1.000	1.000	1.000	1.000
Latest 3 Volume Weighted:								
	1.438	1.121	1.000	1.000	1.000	1.000	1.000	1.000
Latest 5 Volume Weighted:								
	1.481	1.130	1.000	1.000	1.000	1.000	1.000	1.000
Latest 7 Volume Weighted:								
	1.509	1.151	1.000	1.000	1.000	1.000	1.000	1.000
Selected Factors:								
	1.500	1.110	1.000	1.000	1.000	1.000	1.000	1.000

* Factor is infinite or undefined

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MARLIA-1a

GIRO
As At 31 December 1989
Sterling
Reported Premium

Underwriting Year	Reported Premium (In Thousands) - Evaluations in Years						
	9	10	11	12	13	14	15
1975	134.236	134.236	134.236	134.236	134.236	134.236	134.236
1976	169.137	169.137	169.137	169.137	169.137	169.137	
1977	187.931	187.931	187.931	187.931	187.931		
1978	144.975	144.975	144.975	144.975			
1979	177.192	177.192	177.192				
1980	214.778	214.778					
1981	246.995						
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							

Underwriting Year	Reported Loss Report to Report Development Factors - Evaluations in Years						
	9-10	10-11	11-12	12-13	13-14	14-15	15-
1975	1.000	1.000	1.000	1.000	1.000	1.000	
1976	1.000	1.000	1.000	1.000	1.000		
1977	1.000	1.000	1.000	1.000			
1978	1.000	1.000	1.000				
1979	1.000	1.000					
1980	1.000						
1981							
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							

Simple Average of Latest 3:	1.000	1.000	1.000	1.000	1.000	1.000	***
Simple Average of Latest 5:	1.000	1.000	1.000	1.000	1.000	1.000	***
Latest 3 Volume Weighted:	1.000	1.000	1.000	1.000	1.000	1.000	***
Latest 5 Volume Weighted:	1.000	1.000	1.000	1.000	1.000	1.000	***
Latest 7 Volume Weighted:	1.000	1.000	1.000	1.000	1.000	1.000	***
Selected Factors:	1.000	1.000	1.000	1.000	1.000	1.000	1.000

* Factor is infinite or undefined

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GIRO
As At 31 December 1989
Sterling
Paid Losses

Paid Losses (In Thousands) - Evaluations in Years								
Underwriting Year	1	2	3	4	5	6	7	8
1975	4.023	29.439	76.601	100.875	111.558	119.278	159.536	136.349
1976	7.339	23.105	49.935	71.219	188.241	194.113	213.222	205.611
1977	7.693	18.729	63.064	91.497	120.936	176.362	180.222	251.822
1978	2.773	18.946	35.936	55.317	61.678	67.604	140.943	148.173
1979	31.858	40.937	60.400	83.044	121.534	152.468	167.935	163.097
1980	4.730	31.097	49.337	81.603	103.349	107.671	108.160	130.777
1981	51.566	75.677	114.820	139.856	164.619	182.533	200.337	216.321
1982	16.636	48.576	94.515	134.229	212.406	239.127	302.871	315.973
1983	82.663	101.963	134.827	160.025	174.704	189.029	202.730	
1984	19.789	41.291	60.563	78.504	103.675	116.614		
1985	26.503	88.127	134.501	179.026	190.905			
1986	6.225	51.539	73.067	92.748				
1987	8.046	19.082	48.793					
1988	6.062	21.610						
1989	4.431							

Paid Loss Report to Report Development Factors - Evaluations in Years								
Underwriting Year	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9
1975	7.318	2.602	1.317	1.106	1.069	1.338	.855	1.253
1976	3.148	2.161	1.426	2.643	1.031	1.098	.964	1.012
1977	2.435	3.367	1.451	1.322	1.458	1.022	1.397	.900
1978	6.832	1.897	1.539	1.115	1.096	2.085	1.051	1.096
1979	1.285	1.475	1.375	1.463	1.255	1.101	.971	1.095
1980	6.574	1.587	1.654	1.266	1.042	1.005	1.209	1.040
1981	1.468	1.517	1.218	1.177	1.109	1.098	1.080	1.001
1982	2.920	1.946	1.420	1.582	1.126	1.267	1.043	
1983	1.233	1.322	1.187	1.092	1.082	1.072		
1984	2.087	1.467	1.296	1.321	1.125			
1985	3.325	1.526	1.331	1.066				
1986	8.279	1.418	1.269					
1987	2.372	2.557						
1988	3.565							
1989								
Simple Average of Latest 3:								
	4.739	1.834	1.299	1.160	1.111	1.146	1.111	1.045
Simple Average of Latest 5:								
	3.926	1.658	1.301	1.248	1.097	1.109	1.071	1.026
Latest 3 Volume Weighted:								
	4.536	1.615	1.306	1.124	1.110	1.156	1.085	1.041
Latest 5 Volume Weighted:								
	3.327	1.496	1.296	1.224	1.100	1.128	1.059	1.011
Latest 7 Volume Weighted:								
	2.243	1.551	1.309	1.251	1.120	1.169	1.090	1.037
Selected Factors:								
	3.500	1.500	1.300	1.250	1.120	1.100	1.080	1.060

* Factor is infinite or undefined

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GIRO
As At 31 December 1989
Sterling
Paid Losses

Paid Losses (In Thousands) - Evaluations in Years							
Underwriting Year	9	10	11	12	13	14	15
-----	-----	-----	-----	-----	-----	-----	-----
1975	170.790	158.204	158.394	158.530	158.585	158.585	158.585
1976	207.976	231.570	246.575	250.028	251.251	251.251	
1977	226.596	250.897	251.441	266.609	276.368		
1978	162.390	185.876	182.152	187.833			
1979	178.537	178.564	180.358				
1980	136.023	138.225					
1981	216.593						
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							

Paid Loss Report to Report Development Factors - Evaluations in Years							
Underwriting Year	9-10	10-11	11-12	12-13	13-14	14-15	15-
-----	-----	-----	-----	-----	-----	-----	-----
1975	.926	1.001	1.001	1.000	1.000	1.000	
1976	1.113	1.065	1.014	1.005	1.000		
1977	1.107	1.002	1.060	1.037			
1978	1.145	.980	1.031				
1979	1.000	1.010					
1980	1.016						
1981							
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							
Simple Average of Latest 3:							
	1.054	.997	1.035	1.014	1.000	1.000	***
Simple Average of Latest 5:							
	1.076	1.012	1.027	1.014	1.000	1.000	***
Latest 3 Volume Weighted:							
	1.054	.998	1.036	1.016	1.000	1.000	***
Latest 5 Volume Weighted:							
	1.081	1.014	1.029	1.016	1.000	1.000	***
Latest 7 Volume Weighted:							
	1.056	1.014	1.029	1.016	1.000	1.000	***
Selected Factors:							
	1.040	1.030	1.015	1.010	1.000	1.000	1.000

* Factor is infinite or undefined

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GIRO
As At 31 December 1989
Sterling
Incurred Losses

Incurred Losses (In Thousands) - Evaluations in Years								
Underwriting Year	1	2	3	4	5	6	7	8
1975			107.345	171.415	181.636	139.910	240.731	218.822
1976			66.163	116.940	226.406	261.906	280.962	231.706
1977			109.085	121.670	268.621	260.738	251.088	323.775
1978			214.337	242.607	214.201	272.236	362.347	260.792
1979			220.725	181.201	183.022	187.915	179.271	184.109
1980			89.078	159.998	193.977	157.117	126.128	152.468
1981			214.255	188.350	213.983	237.224	273.677	284.631
1982			144.803	252.773	346.771	320.920	373.383	387.736
1983			261.635	284.224	291.155	251.686	241.030	
1984			156.410	206.481	243.477	205.149		
1985			283.163	320.920	325.759			
1986			159.155	146.570				
1987			90.492					
1988								
1989								

Incurred Loss Report to Report Development Factors - Evaluations in Years								
Underwriting Year	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9
1975			1.597	1.060	.770	1.721	.909	1.018
1976			1.767	1.936	1.157	1.073	.825	.983
1977			1.115	2.208	.971	.963	1.289	.953
1978			1.132	.883	1.271	1.331	.720	.838
1979			.821	1.010	1.027	.954	1.027	.970
1980			1.796	1.212	.810	.803	1.209	1.034
1981			.879	1.136	1.109	1.154	1.040	.877
1982			1.746	1.372	.925	1.163	1.038	
1983			1.086	1.024	.864	.958		
1984			1.320	1.179	.843			
1985			1.133	1.015				
1986			.921					
1987								
1988								
1989								
Simple Average of Latest 3:	***	***	1.125	1.073	.877	1.092	1.096	.960
Simple Average of Latest 5:	***	***	1.241	1.145	.910	1.006	1.007	.934
Latest 3 Volume Weighted:	***	***	1.126	1.060	.882	1.097	1.067	.943
Latest 5 Volume Weighted:	***	***	1.205	1.134	.909	1.033	.966	.923
Latest 7 Volume Weighted:	***	***	1.192	1.128	.968	1.071	.988	.944
Selected Factors:	***	***	1.200	1.130	.970	1.070	1.030	.940

* Factor is infinite or undefined

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GIRO
As At 31 December 1989
Sterling
Incurred Losses

Incurred Losses (In Thousands) - Evaluations in Years							
Underwriting Year	9	10	11	12	13	14	15
-----	-----	-----	-----	-----	-----	-----	-----
1975	222.654	189.437	189.627	158.530	158.585	158.585	158.585
1976	227.792	268.729	258.944	262.396	251.251	251.251	
1977	308.416	310.727	309.884	310.944	323.448		
1978	218.550	209.063	201.995	207.785			
1979	178.537	178.564	180.358				
1980	157.715	148.119					
1981	249.620						
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							

Incurred Loss Report to Report Development Factors - Evaluations in Years							
Underwriting Year	9-10	10-11	11-12	12-13	13-14	14-15	15-
-----	-----	-----	-----	-----	-----	-----	-----
1975	.851	1.001	.836	1.000	1.000	1.000	
1976	1.180	.964	1.013	.958	1.000		
1977	1.007	.997	1.003	1.040			
1978	.957	.966	1.029				
1979	1.000	1.010					
1980	.939						
1981							
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							
Simple Average of Latest 3:	.965	.991	1.015	.999	1.000	1.000	***
Simple Average of Latest 5:	1.017	.988	.970	.999	1.000	1.000	***
Latest 3 Volume Weighted:	.966	.991	1.013	1.002	1.000	1.000	***
Latest 5 Volume Weighted:	1.022	.986	.978	1.002	1.000	1.000	***
Latest 7 Volume Weighted:	.993	.986	.978	1.002	1.000	1.000	***
Selected Factors:	.990	.990	1.000	1.000	1.000	1.000	1.000

* Factor is infinite or undefined

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MARLIA-1c

Giro Example
MARINE LIABILITY
Sterling 000s
31 December 1989

-----PROJECTION SUMMARY-----

Underwriting Year	Selected Ultimate Premiums	Selected Ultimate Losses	Estimated Unpaid Premiums	Reported O/S Losses	Estimated IBNR Losses	Estimated Total Reserve	Reported Reserve	Estimated Redundancy/ (Deficiency)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1975	134	159	0	0	0	0	0	0
1976	169	251	0	0	0	0	0	0
1977	188	323	0	47	0	47	47	0
1978	145	208	0	20	0	20	20	0
1979	177	180	0	0	0	0	0	0
1980	215	147	0	10	(1)	8	10	1
1981	247	245	0	33	(5)	28	33	5
1982	226	357	0	72	(31)	41	72	31
1983	252	229	0	38	(12)	26	38	12
1984	346	208	0	89	3	92	89	(3)
1985	357	321	0	135	(5)	130	135	5
1986	518	256	0	54	109	163	54	(109)
1987	612	305	0	42	214	256	42	(214)
1988	709	491	70	0	469	399	0	(399)
1989	742	622	296	0	617	321	0	(321)
Totals	5,038	4,301	367	539	1,359	1,532	539	(993)

Underwriting Year	Estimated Ultimate Premiums	Paid Development Method	Incurred Development Method	Paid BF Method	Incurred BF Method	Expected Loss Ratio Method	Initial Expected Loss Ratio	Selected Ultimate Loss Ratio
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1975	134	159	159	159	159	159	1.181	1.181
1976	169	251	251	251	251	251	1.485	1.485
1977	188	276	323	276	323	323	1.721	1.721
1978	145	190	208	190	208	208	1.433	1.433
1979	177	185	180	185	180	180	1.018	1.018
1980	215	146	147	146	147	147	0.683	0.683
1981	247	238	245	238	245	245	0.991	0.991
1982	226	368	357	366	357	357	1.584	1.584
1983	252	255	229	250	229	229	0.906	0.906
1984	346	161	208	174	208	208	0.601	0.601
1985	357	296	321	305	321	321	0.899	0.899
1986	518	180	163	318	194	466	0.900	0.494
1987	612	123	121	381	229	551	0.900	0.498
1988	709	82	82	491	491	638	0.900	0.692
1989	742	59	59	622	622	668	0.900	0.838
Totals	5,038	2,967	3,052	4,352	4,163	4,951		

Underwriting Year	Reported Premiums	Reported Paid Losses	Reported Incurred Losses	Expected % of Premiums Reported	Expected % of Losses Paid	Expected % of Losses Reported	Paid Loss Ratio	Incurred Loss Ratio
(1)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
1975	134	159	159	100.0%	100.0%	100.0%	1.181	1.181
1976	169	251	251	100.0%	100.0%	100.0%	1.485	1.485
1977	188	276	323	100.0%	100.0%	100.0%	1.471	1.721
1978	145	188	208	100.0%	99.0%	100.0%	1.296	1.433
1979	177	180	180	100.0%	97.5%	100.0%	1.018	1.018
1980	215	138	148	100.0%	94.7%	101.0%	0.644	0.690
1981	247	217	250	100.0%	91.1%	102.0%	0.877	1.011
1982	226	316	388	100.0%	85.9%	108.5%	1.401	1.719
1983	252	203	241	100.0%	79.5%	105.4%	0.803	0.955
1984	346	117	205	100.0%	72.3%	98.5%	0.337	0.592
1985	357	191	326	100.0%	64.6%	101.5%	0.535	0.912
1986	518	93	147	100.0%	51.7%	89.9%	0.179	0.283
1987	612	49	90	100.0%	39.7%	74.9%	0.080	0.148
1988	639	22	22	90.1%	26.5%	26.5%	0.034	0.034
1989	446	4	4	60.1%	7.6%	7.6%	0.010	0.010
Totals	4,671	2,403	2,942					

Giro Example
MARINE LIABILITY
Sterling 000s
31 December 1989

-----PROJECTION SUMMARY-----

Underwriting Year	Selected Ultimate Premiums	Selected Ultimate Losses	Estimated Unpaid Premiums	Reported O/S Losses	Estimated IBNR Losses	Estimated Total Reserve	Reported Reserve	Estimated Redundancy/ (Deficiency)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1975	134	159	0	0	0	0	0	0
1976	169	251	0	0	0	0	0	0
1977	188	323	0	47	0	47	47	0
1978	145	208	0	20	0	20	20	0
1979	177	180	0	0	0	0	0	0
1980	215	147	0	10	(1)	8	10	1
1981	247	245	0	33	(5)	28	33	5
1982	226	357	0	72	(31)	41	72	31
1983	252	229	0	38	(12)	26	38	12
1984	346	208	0	89	3	92	89	(3)
1985	357	321	0	135	(5)	130	135	5
1986	518	256	0	54	109	163	54	(109)
1987	612	305	0	42	214	256	42	(214)
Totals	3,587	3,189	0	539	273	812	539	(273)

Underwriting Year	Estimated Ultimate Premiums	Paid Development Method	Incurred Development Method	Paid BF Method	Incurred BF Method	Expected Loss Ratio Method	Initial Expected Loss Ratio	Selected Ultimate Loss Ratio
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1975	134	159	159	159	159	159	1.181	1.181
1976	169	251	251	251	251	251	1.485	1.485
1977	188	276	323	276	323	323	1.721	1.721
1978	145	190	208	190	208	208	1.433	1.433
1979	177	185	180	185	180	180	1.018	1.018
1980	215	146	147	146	147	147	0.683	0.683
1981	247	238	245	238	245	245	0.991	0.991
1982	226	368	357	366	357	357	1.584	1.584
1983	252	255	229	250	229	229	0.906	0.906
1984	346	161	208	174	208	208	0.601	0.601
1985	357	296	321	305	321	321	0.899	0.899
1986	518	180	163	318	194	466	0.900	0.494
1987	612	123	121	381	229	551	0.900	0.498
Totals	3,587	2,827	2,912	3,239	3,051	3,645		

Underwriting Year	Reported Premiums	Reported Paid Losses	Reported Incurred Losses	Expected % of Premiums Reported	Expected % of Losses Paid	Expected % of Losses Reported	Paid Loss Ratio	Incurred Loss Ratio
(1)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
1975	134	159	159	100.0%	100.0%	100.0%	1.181	1.181
1976	169	251	251	100.0%	100.0%	100.0%	1.485	1.485
1977	188	276	323	100.0%	100.0%	100.0%	1.471	1.721
1978	145	188	208	100.0%	99.0%	100.0%	1.296	1.433
1979	177	180	180	100.0%	97.5%	100.0%	1.018	1.018
1980	215	138	148	100.0%	94.7%	101.0%	0.644	0.690
1981	247	217	250	100.0%	91.1%	102.0%	0.877	1.011
1982	226	316	388	100.0%	85.9%	108.5%	1.401	1.719
1983	252	203	241	100.0%	79.5%	105.4%	0.803	0.955
1984	346	117	205	100.0%	72.3%	98.5%	0.337	0.592
1985	357	191	326	100.0%	64.6%	101.5%	0.535	0.912
1986	518	93	147	100.0%	51.7%	89.9%	0.179	0.283
1987	612	49	90	100.0%	39.7%	74.9%	0.080	0.148
Totals	3,587	2,377	2,916					

A GUIDE TO THE PROJECTION SUMMARY**Col No**

1. Underwriting Year
2. Selected Ultimate Premiums = Estimated Ultimate Premiums
3. Selected Ultimate Losses = Individual Selections
4. Estimated Unpaid Premiums = Selected Ultimate Premiums
- Reported Premiums

= (2) - (18)
5. Reported Outstanding Losses = Reported Incurred Losses
- Reported Paid losses

= (20) - (19)
6. Estimated IBNR Losses = Selected Ultimate Losses
- Reported Outstanding Losses

= (3) - (20)
7. Estimated Total Reserve = Reported O/S Losses +
Estimated IBNR Losses -
Estimated Unpaid Premiums

= (5) + (6) - (4)
8. Reported Reserve = Reported O/S Losses

= (5)
9. Estimated Redundancy/
(Deficiency) = Reported Reserve - Estimated
Total Reserve

= (8) - (7)
10. Estimated Ultimate Premiums = Reported premium + Expected
% of Premiums Reported

= (18) + (21)
11. Paid Development Method = Reported Paid Losses +
Expected % of Losses Paid

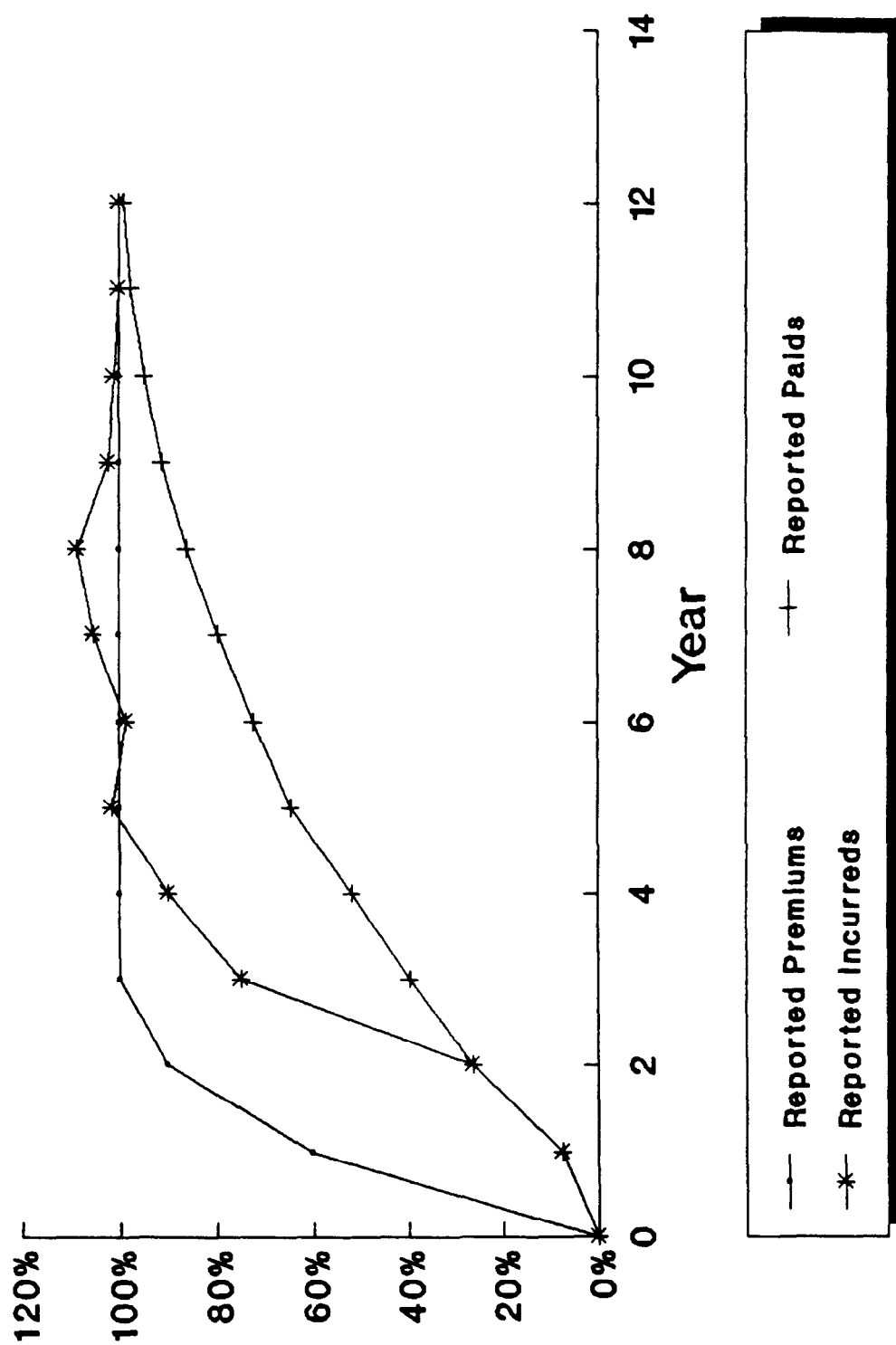
= (19) + (22)
12. Incurred Development Method = Reported Incurred losses +
Expected % Losses Reported

= (20) + (23)

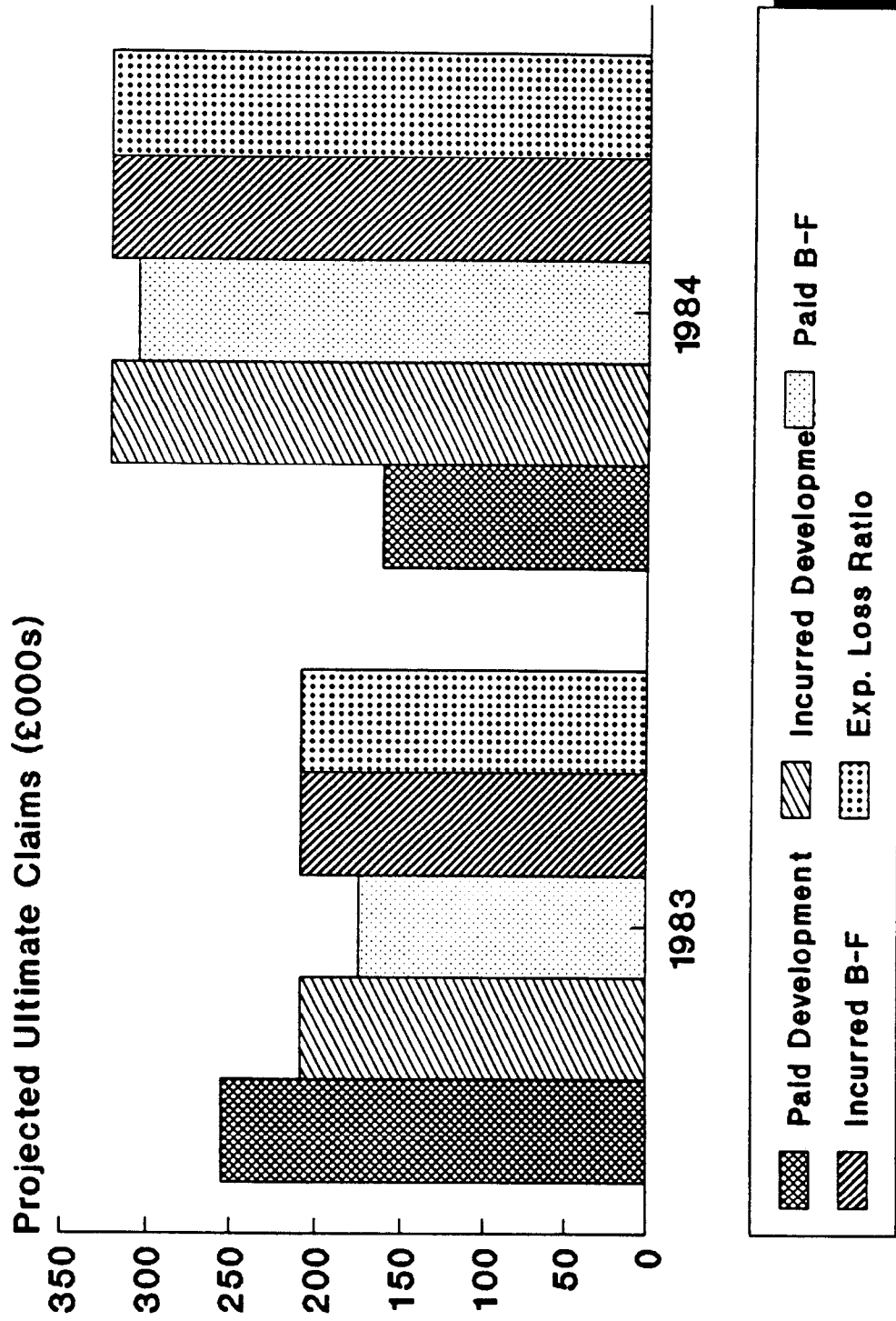
Col. No

13.	Paid Bornhuetter-Ferguson	=	Reported Paid Losses + (1- Expected % of Losses Paid) x Initial Expected Loss Ratio x Selected Ultimate Premiums
		=	(19) + [1-(22)] x (16) x (2)
14.	Incurred Bornhuetter-Ferguson Method	=	Reported Incurred Losses + (1- Expected % of Losses Reported) x I.E.L.R. x Selected Ultimate Premiums
		=	(20) + [1-(23)] x (16) x (2)
15.	Expected Loss Ratio Method	=	I.E.L.R. x Selected Ultimate Premiums
		=	(16) x (2)
16.	Initial Expected Loss Ratio (I.E.L.R.)	=	Incurred Development Method + Selected Ultimate Premiums or individual selections
		=	(12) + (2)
17.	Selected Ultimate Loss Ratio	=	Individual selections
18.	Reported Premiums	=	Data
19.	Reported Paid Losses	=	Data
20.	Reported Incurred Losses	=	Data
21.	Expected % of Premiums Reported		
22.	Expected % Of Losses Paid		Depend on selected
23.	Expected % of Losses Reported		Report to Report factor
24.	Paid Loss Ratio	=	Reported Paid Losses + Reported Premiums
		=	(19) + (18)
25.	Incurred Loss Ratio	=	Reported Incurred Losses + Reported Premiums
		=	(20) + (18)

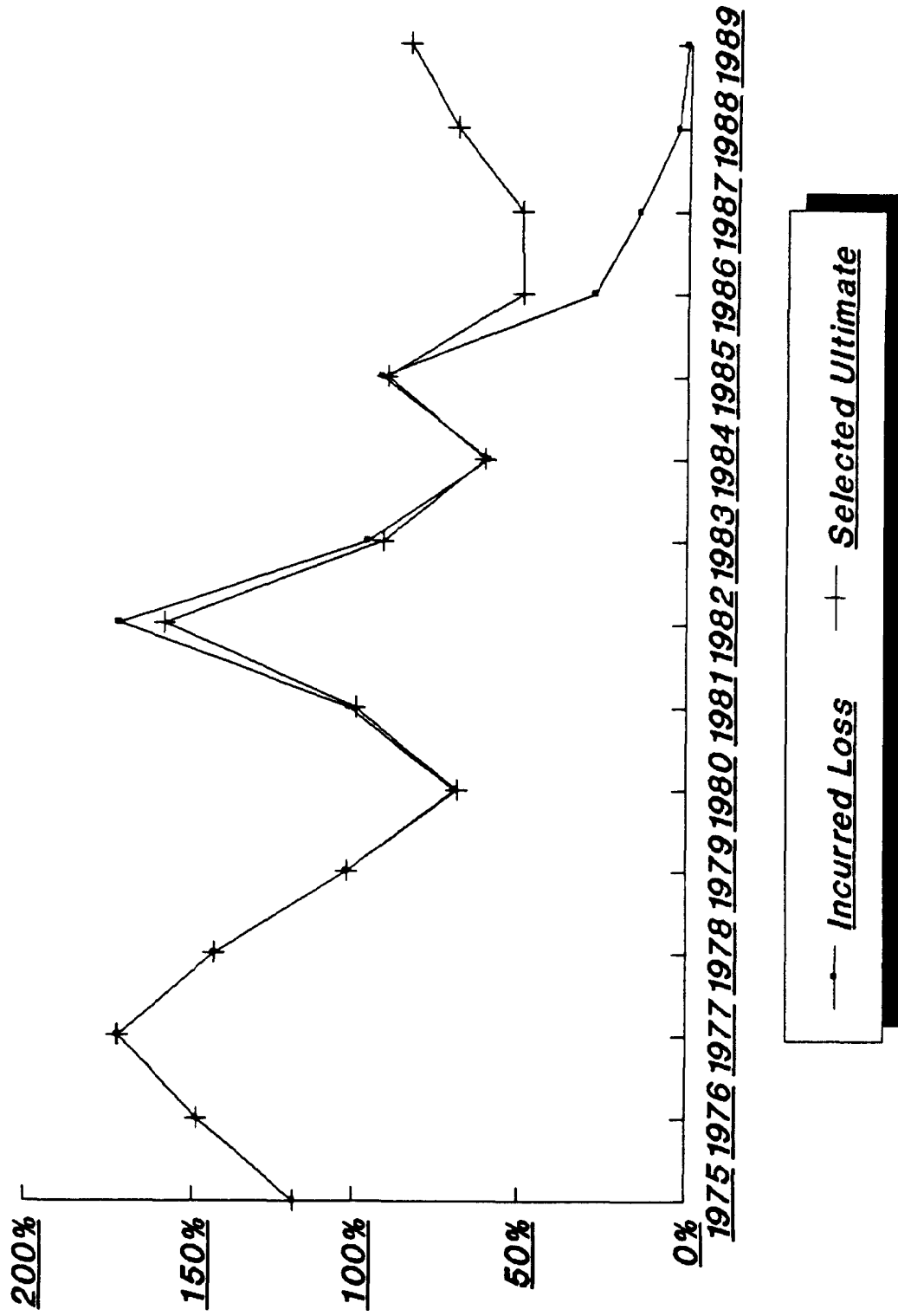
DEVELOPMENT PATTERNS



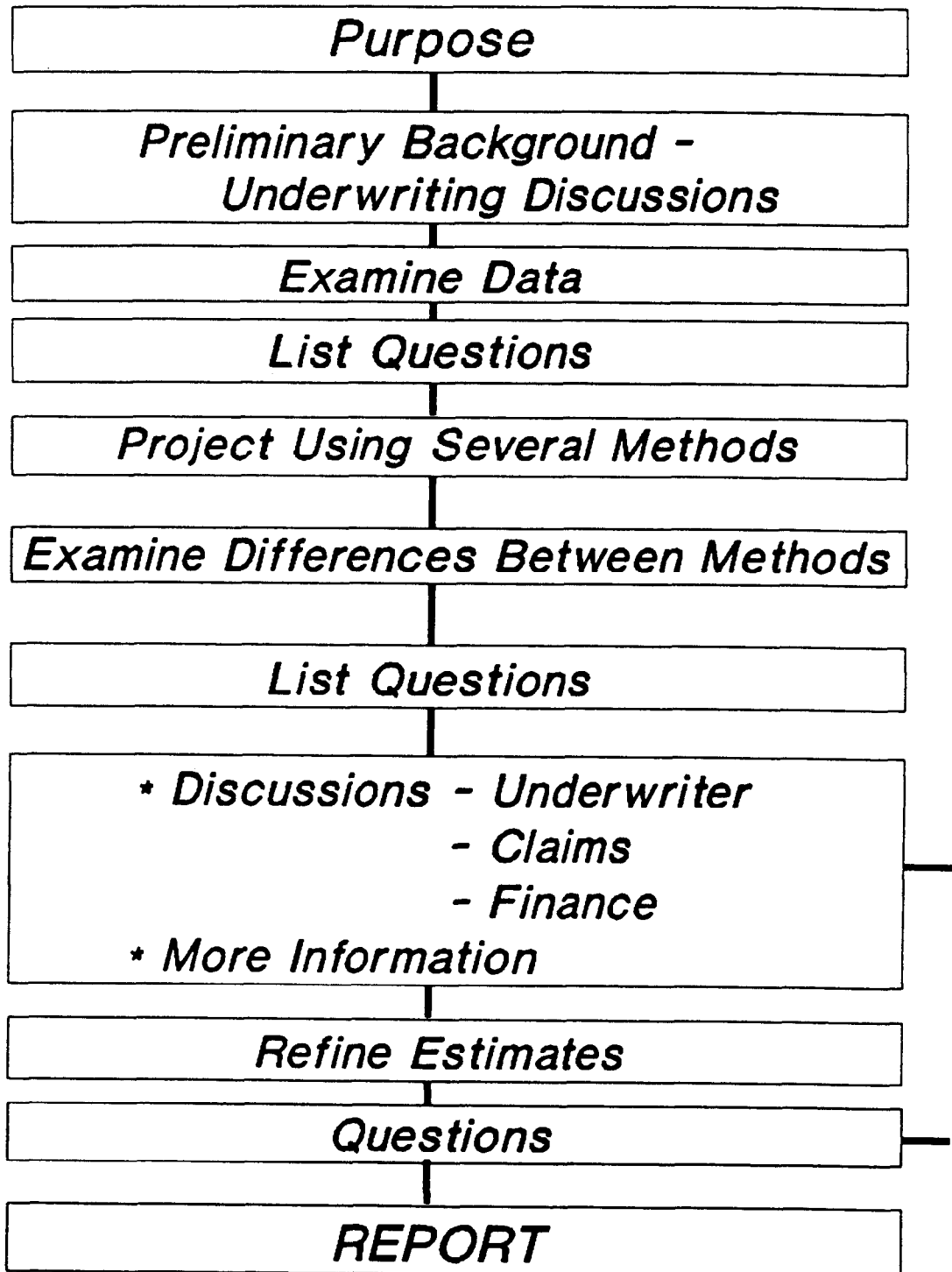
COMPARISON OF METHODS



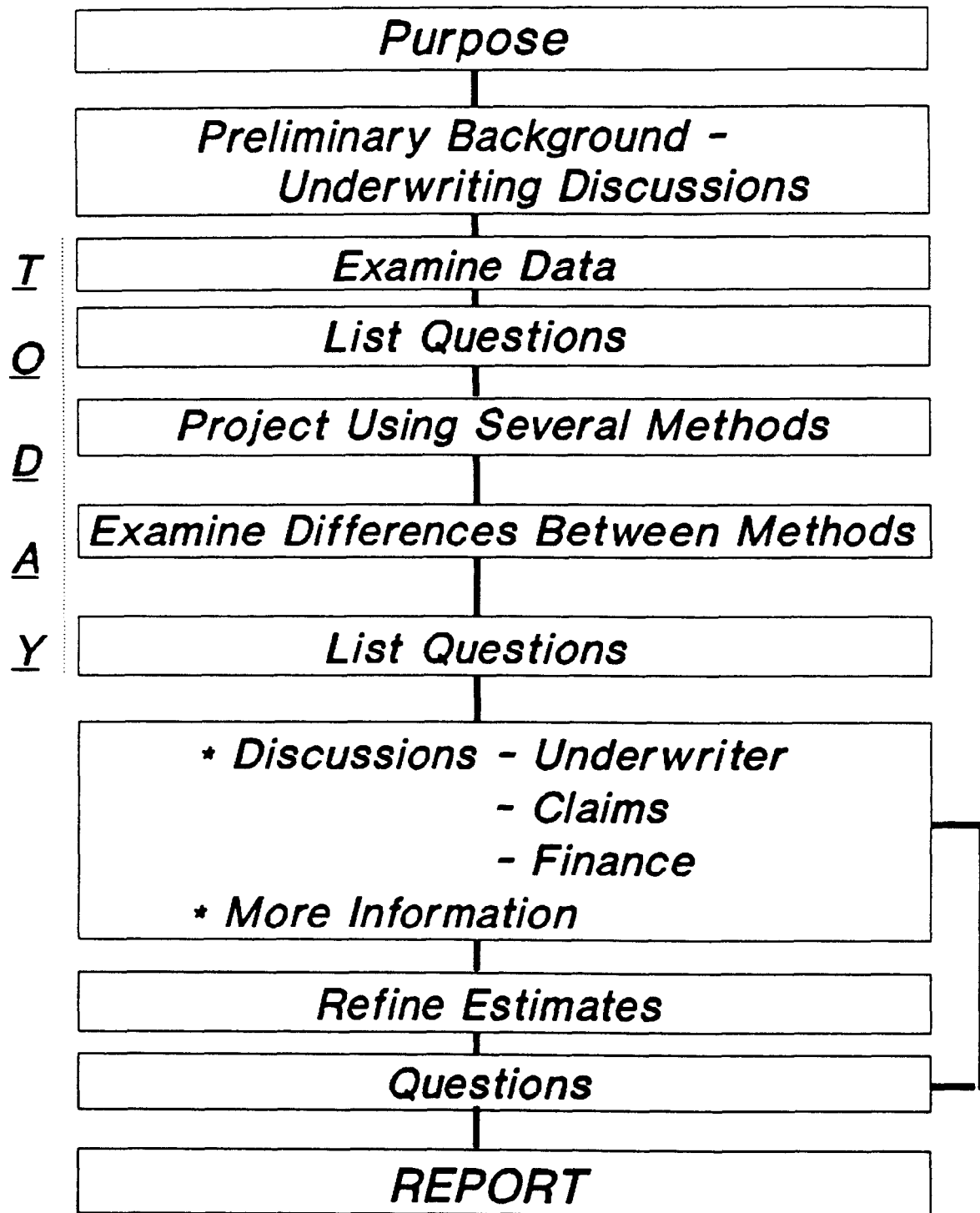
INCURRED AND ULTIMATE LOSS RATIOS



THE RESERVING PROCESS



THE RESERVING PROCESS



THE TRADITIONAL APPROACH

Remember, in the London Market the BORNHEUTTER-FERGUSON Method;

- *Is post BEATLES*
- *Began around JIMMY HENDRIX*
- *Developed alongside THE SEX PISTOLS*
- *Is widely used along with MADONNA*

GENERAL QUESTIONS (EXAMPLES)

- *Context and Relative Importance of Account*
- *Mix of Business and Changes*
- *Underwriting Philosophy*
- *Leading or Following, Line Size.....*
- *Exposures*
- *Mix of Claims Emerging and Changes*
 - Past and Future Expectations
- *Admin. Changes, Claims Handling,.....*
- *Direct / R/I Content, Large Risks*
 Large Claims, Gross or Net,.....

DEVELOPMENT METHOD

- *Cumulative Triangle*
- *Development Factor Triangle*
- *Averages of 2/1, 3/2, 4/3, etc.*
- *Select Period to Period Factors*
- *Multiply Factors to Give
Ult/1, Ult/2,and*
- *Express as " % of ULTIMATE "*
- *ULTIMATE -*
$$\frac{\text{Booked Value}}{\text{Selected \% of Ult.}}$$

*Exhibit 1.1 gives an example
applied to premiums.*

BORNHEUTTER-FERGUSON METHOD

- *Select INITIAL EXPECTED LOSS RATIOS*

- *Ultimate = Booked +
(1- Selected % of Ult.)*
Ult. Premium * IELR*

*See Exhibit 4.1 for example
calculations in Columns (13) & (14).*

SPECIFIC QUESTIONS (EXAMPLES)

Premiums (Exhibit 1)

- *Rhythm in Premium Development*
- *Large Jump in 1986*

Paid (Exhibit 2)

- *Smoother Development Than Incurred*

Incurred (Exhibit 3)

- *Check Why No Calendar Year Effect*
- *Why Lumpy Development?*
- *Check Case Estimate Procedures*

SPECIFIC QUESTIONS (EXAMPLES)

Other (Exhibit 4)

- *Number of Oddities - Why ?
What Changes have there been ?*
- *Loss Ratios Lumpy (Exhibit 5.3)*
- *1984 Odd (Exhibit 5.2)*
- *IBNR's Relatively Small*
- *Check Future Exposures*

CONCLUSIONS

Need to Speak to ;

UNDERWRITER

CLAIMS

FINANCE