Historical Perspective on Industry Results
Understanding The Key Drivers of Changes in Results

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Exhibit 1

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Simplified Model of Loss Ratio in Changing Markets
Comparing Actual Loss Ratios To Trended On-Level Prediction

	Actual (Model)	Ultimate Loss Ratio Trended On-Level Loss Ratio in 2000		Trended On-Level Loss Ratio in 2002	
		Year	5 Yr. Avg	Year	5 Yr. Avg
	1	2	3	4	5
1995	60%	77%	77%	62%	62%
1996	67%	81%	77%	65%	62%
1997	74%	85%	79%	69%	64%
1998	82%	90%	82%	73%	66%
1999	91%	95%	86%	77%	69%
2000	100%			81%	73%
2001	78%			70%	74%
2002	60%				

Notes
1 Model created to quantify changes in key drivers of results (Exhibit 1A) from
   steady-state 60% loss ratio in Base year through a soft and hard market.
2 Standard trend and on-level methods used to measure the impact of
   price changes and trend only on Trended On-Level Loss Ratio (TOLLR).
3 5 year average approach yields 86% predicted loss ratio for 2000.
4 If one follows the "trend" in column 2, a reasonable estimate for 2000
   might be 100%.
5 What adjustments are needed to eliminate the "bias" in the TOLLR.
6 Model assumes no changes in speed of settlement or case reserve adequacy.
7 If one follows the "trend" in column 4, a reasonable estimate for 2002
   might be 60%.

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Simplified Model of Loss Ratio in Changing Markets

Assumptions and Impact of Cumulative Change

	Base	Soft Market		Hard Market	
	1995	1996	2000	2001	2002
Assumptions					
Price	5%	0%	0%	17%	17%
Trend	5%	5%	5%	5%	5%
R/N Improvement	3%	2%	2%	15%	15%
R/N Retention	80%	75%	75%	70%	70%
New Business %	20%	30%	30%	26%	26%
New Quality (Vs R/N)	15%	25%	25%	-3%	-3%
Modeled Loss Ratio	60%	67%	100%	78%	60%
Changes in Base Assumptions					
Price Only		63%	77%	69%	62%
Add Renewal Retention/Quality		64%	83%	64%	50%
Add New Retention/Quality		67%	100%	78%	60%
Premium Growth	5%	5%	5%	12%	12%

Observations:
1 Assumptions reflect hypothetical changes in a long-tail commercial line in the soft market.
2 Renewal (R/N) Improvement reflects the impact of re-underwriting that
   occurs on renewal. It also includes changes in terms and conditions.
3 Renewal Retention is a % of last year total premium adjusted for rate level changes.
4 New Business is a % of last year total premium adjusted for rate level changes.
5 New Quality is the ratio of new business loss ratio to renewal loss ratio for the current year.
6 R/N loss ratio changes by the difference between price and loss trend net of the renewal
   improvements (calculated as an equivalent rate change, e.g., 3% in the base year).
7 Modeled loss ratio measures the impact of all assumption changes.
8 Changes in Base Assumptions shows the progressive impact of each change.

Exhibit 2

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Why We Don't Recognize The Change

**The Bias in Trended/On-Level Loss Ratios In Underwriting Cycles
Isolating The Impact of New Vs. Renewal Loss Ratios**

	Model	Predicted	Bias
End of Soft Market			
Model Loss Ratio for Trough Year	100%		
5 Year Trended and On-Level Loss Ratio		86%	-15%
Second Year of Hard Market			
Model Loss Ratio for Peak Year	60%		
5 Year Trended and On-Level Loss Ratio			
Without adjustment for U/W Changes		74%	23%
With Adjustment for U/W and New, R/N Mix Changes		60%	0%

Observations:
1. Standard actuarial methods of adjusted loss ratios for trend and premium increases
   will understate current loss ratio in soft markets and overstate them in hard markets.
2. This bias can be mitigated, as shown in the last row, by specifically adjusting for
   the impact of renewal underwriting and new business quality.
   Similar adjustments can be made in the soft market.
3. **Caveat: adjustments may require substantial history and/or modeling to estimate
   the impact of changing market dynamics on results prospectively.**
4. Details of adjustment not shown in this package.

Exhibit 3

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Why We Don't Recognize The Change

The Loss Development Cycle
Medical Malpractice, Claims Made, Industry Aggregate

Measurements of Case Reserve Adequacy	Base Period 1992 to 1998	Latest Period 2001	Difference in Case Reserve Adequacy
Paid to Incurred Ratio	56%	59%	5%
Next Year's Paid to Current Case O/S	30%	40%	32%
This Year's Case O/S To Latest Year's Paid	427%	339%	26%

Development Factors From 2 to 10 Years of Development

	Average 1992 to 2001	Actual During 2002	Difference
Paid	3.99	5.01	126%
Incurred	1.13	1.43	127%

Observations:

1 Standard measures of paid to incurred ratios show little deterioration in case reserve adequacy during the studied period for this line.

2 We compute two alternate measures for reserve adequacy.
   A. Next year's paid versus prior year case reserve outstanding.
   The higher the ratio, the less adequate the loss reserves, all else equal.
   It is measured for a fixed development time period, for example, paid from 3 to 4 years of development versus the case reserve at the end of the third year. The number shown is a composite of the indices calculated for development periods from 2 to 9 years.
   B. Current outstanding case reserves to prior calendar year paid (Survival Ratio). See A.

3 These measures are subject to significant volatility that may not be an indication of case reserve adequacy changes on a company basis. However, industry trends may be statistically significant. Company trends can be a good indicator that more study is needed.

4 The bottom half of the exhibit contains development factors one might have selected during 2002 using industry aggregate data for 1992-2001 and no adjustment for changing case case reserve adequacy or speed of payment. Factor is for 2 to 10 years of development. During 2002, if one takes the latest "diagonal" of loss development factors from 2 to 10 years, the actual development was 25% worse than "expected".

5 Source: AM Best Aggregates & Averages - 2001 Data

Exhibit 4

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Why We Don't Recognize The Change

Investment Cycle
Medical Malpractice, Claims Made, Industry Aggregate

	Calendar Year			Accident Year			Difference Acc Yr Vs Cal Yr		
	C/R	Inv Inc	O/R	CY	Inv Inc	O/R	C/R	Inv Inc	O/R
80-84	146%	39%	108%	177%	48%	130%	31%	9%	22%
85-90	124%	33%	91%	91%	21%	70%	-33%	-12%	-21%
91-94	109%	40%	69%	118%	21%	97%	9%	-19%	28%
95-01	121%	27%	94%	160%	16%	144%	39%	-11%	49%
2002	141%	12%	129%	130%	13%	117%	-11%	1%	-11%

Observations:

1 Data calculated form analysis by year. C/R is combined ratio. Inv Inc is a percent to EP.
O/R is operating ratio which is combined ratio minus Inv Inc (Investment Income).
CY means Calendar Year results. AY means accident year results.

2 This exhibit shows the significant variations that can occur between CY and AY results:
over 30 C/R points in all cycles except the transition years of 1991 to 1994.

3 Accident Year investment income takes the current yield and applies it prospectively
to an accident year using expected payment patterns. When the operating ratio for an
accident year exceeds 100%, money must be "borrowed" from surplus to fund reserves
We charge for this "loan" as a reduction to investment income at 2% more than yield.
Caveat: risk-free taxable yields are used, which can vary from actual investments.

4 The difference between CY and AY investment income can be used in 2 ways:

A When deciding on writing or expanding business, one must use the accident year
Inv Inc ratio, not the calendar year since the calendar year ratio is affected by "portfolio"
yields and any surplus funds put into reserves in prior years.

B Antiicpate changes in future CY year Inv Inc income ratios for planning purposes.
Caveat: changes in premium growth also influence changes in CY Inv Inc Ratio.

5 Source: AM Best - 2002; AY Estimates by Richard A. Lino, Consulting Actuary

Exhibit 5

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Why We Don't Recognize The Change

Industry Aggregate Results - All Lines

| Period | Base | End | Annual Change Relative to GDP | | Loss Ratio Impact | | AY C/R Ex Cats End Year | AY L/R Ex Cats End Year |
			NEP	Loss Ex Cats	Annual	Total		
Type of Market		1980					103%	75%
Soft	1980	1984	-3%	2%	105%	122%	124%	94%
Hard	1984	1987	11%	0%	90%	73%	96%	70%
Transition	1987	1990	-3%	1%	104%	112%	104%	77%
Reverse Loss Trend	1990	1993	-2%	-4%	97%	92%	99%	72%
Soft-Trend Flat	1993	1997	-2%	0%	101%	106%	105%	77%
Soft-Trend up	1997	2000	-2%	2%	104%	114%	117%	88%
Hard	2000	2003	5%	0%	95%	86%	100%	75%

Observations

1 The growth in losses have exceeded GDP (including inflation) except during hard markets and during the "reverse loss trend" period from 1990 to 1997.

2 Data does not reflect any increases in self insurance so total trend in tort costs will be greater once self-insurance is factored in. However, Changes in WC deductibles and State Funds are included.

3 Both soft markets have had losses grow faster than GDP. Possible reasons:
   litigation environment; looser terms and conditions; self-insurers buy down limits; offer of higher limits.

4 The reverse loss trend period was unlike any other in the study period. This period was characterized by major improvements in WC frequency and abating WC severity; and significant reductions in trends in most commercial lines.

5 Accident year Loss Ratios are based on actual reported results through 2002, except for Medical Malpractice which are an estimate by Richard Lino for presentation purposes. Therefore, estimates do not reflect any development during 2003 and 2004 which are most likley to affect the trend and loss ratios for 1997 to 2003 years.

6 Loss trend in soft markets may be understated since companies that go bankrupt no longer report Schedule P data. Such companies are likely to have higher average loss ratios.
   Premium data is from historical calendar year reports. This analysis uses calendar year premium times the latest loss ratio in Schedule P for companies currently reporting results.

7 While author recognizes limitations of this analysis, he suggests valuable insights can be gained by seeking to understand underlying trends in this global context. Individual line data is more useful.

8 Commercial lines results vary more dramatically.

9 Source: AM Best - 2002 Data; 2003 Estimate by Richard Lino for presentation.

Why We Don't Recognize The Change
Reinsurance Industry Versus Industry Aggregate

Accident Year Combined Ratio

	"Top Ten" Reinsurers	Industry Aggregate	Difference
1983-84	158%	123%	35%
1985	128%	117%	11%
1986-88	85%	99%	-14%
1989-97	106%	106%	0%

Reinsurance Industry Total

1994-97	106%	106%	0%
1998-2001	139%	116%	23%
2002-2003	93%	104%	-11%

Notes

1 "Top Ten" - data from analyses compiled in 1992 and 1999 using "OneSource" data.
   There may be some variations between companies included in the two studies.

2 Reinsurance Industry Totals from AM Best data used in slide presentation for this panel.

3 Reinsurance data is reported as of December 2003.

4 Industry Aggregate is reported as December 2002, except for:
   A   Medical Malpractice includes an estimate of future development by Richard A. Lino.
   B   2003 is a rough estimate by Richard A. Lino for presentation purposes.

5 Source: AM Best - 2002 and 2003 Data.

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Exhibit 7

Why We Don't Recognize The Change
Total of 8 Fronting Companies

	Earned Premium			Combined Ratios		
Year	Direct	Ceded	Net	Direct	Ceded	Net
1994	782	461	321	104%	112%	93%
1995	891	540	351	123%	142%	92%
1996	1,233	825	408	122%	136%	92%
1997	1,698	1,303	395	116%	124%	87%
1998	2,003	1,621	382	133%	141%	98%
1999	2,371	1,939	432	148%	160%	92%
	8,979	6,688	2,290	129%	141%	93%

Notes
1 From "OneSource" data, Thompson Financial in 2000.
2 Results are booked numbers without development beyond 1999.
3 Shows significant growth and adverse ceded result to reinsurance industry.
4 $ millions
5 Direct results are actually direct and assumed.
6 Business ceded by fronts grew three times faster than the premium
  assumed by the reinsurers used in the slide presentation for this panel.

Why We Don't Recognize The Change

Reinsurers Growing Share of Market

	Premium	Loss
94-96	4.7%	4.3%
97-01	5.0%	5.8%
Change	6%	35%

Notes
1 Source:
  Reinsurers: AM Best data used in slide presentation exhibits for panel.
  Industry Aggregate Totals from analysis used for Exhibit 5.
2 Growing market share in markets where prices and terms
  are deteriorating at both the primary and reinsurance level
  creates deteriorating profitability.
3 All reinsurers versus total market.

What We Can Do To Understand Results

Measure Key Drivers of Results

1 Build a Relative Framework
   Industry/Peers/Prior Year/Clients

2 Price - Measure All Aspects of Price
   Base Rates, Individual Risk Rating
   Tiers - Especially if New Business Added Does Not Match Discount
   Terms, Conditions and Limits
   Industry Aggregate Trends
   Changes in Classification, Mono-line to Multi-line with big discount
   E&S market to standard market

3 Trend
   Frequency, Severity and Distribution by Size of Loss
   Impact of Limits and Underwriting Changes

4 Renewal Underwriting
   Impact of Company Action Versus Lost to Competition
   Measure Change in Loss Ratio Due to Price, Trend and All Other
   Split All Other into Terms, Conditions, Limit, Underwriting Action and Unexplained
   Measure the impact of every underwriting action, even if rough.
        Develop codes to track loss due to most significant changes.
   Maintain history of observations

5 New Business
   Track relative mix versus renewal. Track across cycles.
   Track relative loss ratio to renewal. Track across cycles.
   Correlate mix, loss ratio and market dynamics.
   Seek details of new books of business.

6 Process
   Change Bonus to paid over long-term
   Feedback loop on ability to estimate ultimate combined ratio.
   Audit:
        Review Changing Retentions
        Compare Actual Business Versus Submission

7 Claims
   Feedback loop to U/W and Actuarial
   Talk to run-off staff - what terms might help future claims settlement
   Interpretation of claim audit results in the pricing analysis.
   Measure changing case reserve adequacy and speed of payment in audit.