

Overall IRIS Ratios		
Ratio	Unusual Range	Formula
1	$\geq 900\%$	$\frac{GWP}{\text{Surplus}}$
		$DWP + \text{Reinsurance WP Assumed (Affiliate and Non)}$
2	$\geq 300\%$	$\frac{NWP}{\text{Surplus}}$
3	$\notin (-33\%, 33\%)$	$\frac{\Delta NWP}{\text{Prior Year NWP}}$
4	$\geq 15\%$	$\frac{\text{Surplus Aid}}{\text{Surplus}}$
		$\frac{\text{Reinsurance Commission Ceded (Contingent and Non – Contingent)}}{\text{Reinsurance Premium Ceded (Affiliate and Non – Affiliated)}} * \sum(\text{UEPR ceded to Non – Affiliate})$
		OR $\text{Estimated reinsurance commission rate} * \sum(\text{UEPR ceded to Non – Affiliate})$

Profitability IRIS Ratios		
Ratio	Usual Range	Formula
5 Two-Year Operating Ratio	$< 100\%$	$[\text{Two – Year}][\text{Loss Ratio} + \text{Expense Ratio} - \text{Investment Income Ratio}]$
		$[\text{Prior} + \text{Current}] \left[\frac{\text{Incurred Loss and LAE} + \text{Dividends to Policyholders}}{EP} \right]$
		$[\text{Prior} + \text{Current}] \left[\frac{\text{Other UW Expense} + \text{Write – ins} - \text{Other Income}}{NWP} \right]$
		$[\text{Prior} + \text{Current}] \left[\frac{\text{Net Investment Income Earned}}{EP} \right]$
6 Investment Yield	(2%, 5.5%)	$\frac{2 * \text{Net Investment Income Earned}}{\text{Prior and Current Cash and Invested Assets}}$
		$\frac{[\text{Prior} + \text{Current}][\text{Cash and Invested Assets} + \text{Investment Income Due and Accrued} - \text{Borrowed Money}]}{\text{Net Investment Income Earned}}$
7	(-10%, 50%)	$\frac{\Delta \text{Surplus}}{\text{Prior Year Surplus}}$
8	(-10%, 25%)	$\frac{\Delta \text{Adjusted Surplus}}{\text{Prior Year Surplus}}$
		$\frac{\text{Current Surplus} - \Delta \text{Surplus Notes} - \text{Capital Paid in or Transferred} - \text{Surplus Paid in or Transferred} - \text{Prior Surplus}}{\text{Prior Year Surplus}}$

Liquidity IRIS Ratios		
Ratio	Usual Range	Formula
9	< 100%	$\frac{\text{Adjusted Liabilities}}{\text{Liquid Assets}}$
		$\text{Total Liabilities} - \text{Deferred Agents' Balances}$
		$\text{Bonds + Stocks (Preferred and Common) + Cash, Cash Equivalents and Short Term Assets + Securities Receivables + Investment Income Due and Accrued} - \text{Investments in Parent, Subs and Affiliates}$
10	< 40%	$\frac{\text{Gross Agents' Balances in Collection (Uncollected and Deferred)}}{\text{Surplus}}$

Reserve IRIS Ratios		
Ratio	Usual Range	Formula
11	<20%	$\frac{\text{One – Year Net Loss Reserve Development}}{\text{Prior Year Surplus}}$
12	<20%	$\frac{\text{Two – Year Net Loss Reserve Development}}{\text{2nd Prior Year Surplus}}$
13	<25%	$\frac{\text{Estimated Reserve Deficiency}}{\text{Surplus}}$
		$\text{Estimated Reserve Deficiency} = \left(\frac{\text{Prior Ratio} + \text{Second Prior Ratio}}{2} \right) * \text{Current Net EP} - \text{Current Loss and LAE Reserves}$
		$\text{Prior Ratio} = \frac{\text{Prior Loss and LAE Reserves} + \text{One Year Reserve Development}}{\text{Prior Net EP}}$
		$\text{Second Prior Ratio} = \frac{\text{Second Prior Loss and LAE Reserves} + \text{Two Year Reserve Development}}{\text{Second Prior Net EP}}$