

Understanding BCAR for Canadian Property/Casualty Insurers

Exhibit B.2: Sample BCAR Calculation

Net Required Capital (NRC)									
	VaR 95		VaR 99		VaR 99.5		VaR 99.6		
	Required Capital Amount	% Gross Required Capital	Required Capital Amount	% Gross Required Capital	Required Capital Amount	% Gross Required Capital	Required Capital Amount	% Gross Required Capital	
B1 Fixed Income Securities Risk	12,195	5	13,621	4	14,459	3	14,563	3	
B2 Equity Securities Risk	57,470	22	74,330	21	80,380	19	81,710	18	
B3 Interest Rate Risk	8,614	3	12,161	3	13,681	3	14,188	3	
B4 Credit Risk	9,997	4	11,825	3	13,812	3	14,893	3	
Total	88,276	34	111,937	32	122,332	29	125,354	28	
B5 Loss & LAE Reserves Risk	46,168	18	69,178	20	78,291	19	81,185	18	
B6 Net Written Premiums Risk	59,783	23	90,098	26	101,916	24	105,736	23	
Total	105,951	41	159,276	45	180,207	43	186,921	41	
B7 Business Risk	3,080	1	3,080	1	3,080	1	3,080	1	
B8 Catastrophe Risk	62,000	24	77,000	22	115,000	27	140,000	31	
Gross Required Capital (GRC)	259,307	100	351,293	100	420,619	100	455,355	100	
Less: Covariance Adjustment	139,665	54	188,280	54	223,180	53	238,310	52	
Net Required Capital (NRC)	119,642	46	163,013	46	197,439	47	217,045	48	

Available Capital		
Capital & Capital Adjustments	Amount	% to Reported Capital
Reported Capital (Surplus)	220,000	100
Equity Adjustments:		
Provision for Reinsurance	1,000	0
Unearned Premium Reserve Equity	-12,600	-6
Loss Reserves Equity	5,958	3
Fixed Income Equity	0	0
Other Adjustments:		
Surplus Notes	0	0
Off-Balance Sheet Losses	0	0
Future Dividends	0	0
Protected Cell Surplus	0	0
Goodwill & Intangibles	8,000	4
Available Capital (AC)	206,358	94

Effective Tax Rate = 20.0%

BCAR = (AC - NRC) / AC	Best's Capital Adequacy Ratio			
	VaR 95	VaR 99	VaR 99.5	VaR 99.6
	42.0	21.0	4.3	-5.2

Net Required Capital Components

The BCAR model calculates the net required capital to support three broad risk categories: investment risk, credit risk and underwriting risk. These three broad risk categories are further subdivided into eight separately analyzed risk components (outlined in **Exhibit B.3**). A rating unit's gross required capital is the sum of the capital requirements for these eight components.