Political Risk and Emerging Markets and Its Implications on Insurance Ratings

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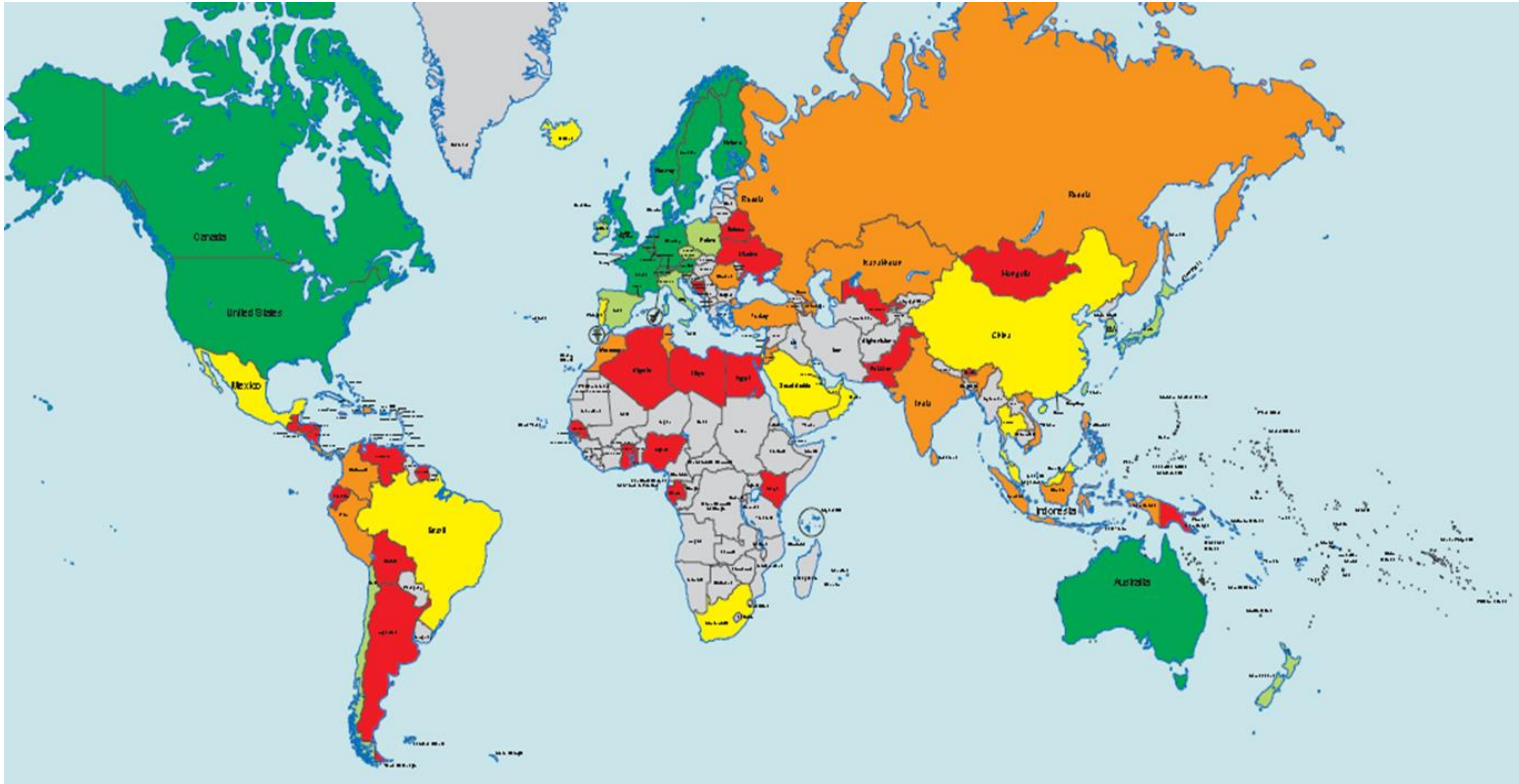
Casualty Loss Reserve Seminar

Agenda

- Country Risk
  - What is country risk?
  - Country Risk Tiers
  - Country risk impact on rating process
- Country investment classes
- Country risk impacts on BCAR and subsequent components of a rating

What is Country Risk?



What is Country Risk?

- AM Best has offices in the following locations
  - Dubai
  - Hong Kong
  - London
  - Mexico City
  - Oldwick
  - Singapore
  - Amsterdam
- 836 ratings outside of the US

Country Risk Tiers

- The Country Risk Tiers (CRTs) provide a general categorization of the degree of risk present in a country
- Risk Classifications
  - Economic risk
  - Political risk
  - Financial System risk
- 136 countries fit in 5 tiers
  - There is a range of countries in each tier
  - The risk level may be somewhat different and the type of risk will not be the same for each country (i.e., political versus economic)

Country Risk Tiers

- Country Risk is the risk that country specific factors could adversely affect an insurer's ability to pay its financial obligations

Economic Risk

- Macroeconomy
- Prospects
- International Transactions
- Government Finance

Political Risk

- Economic Policy
- Business Environment
- Government Stability
- Social Stability
- International Diplomacy
- Legal System

Financial System Risk

Non-Insurance Financial System Risk:

- Banking System
- Vulnerability
- Reporting Standards & Regulations
- Sovereign Debt

Insurance Financial System Risk:

- Government & Legislation
- Supervisory Authority
- Insurer Accountability

Country Risk Tiers – Economic Risk

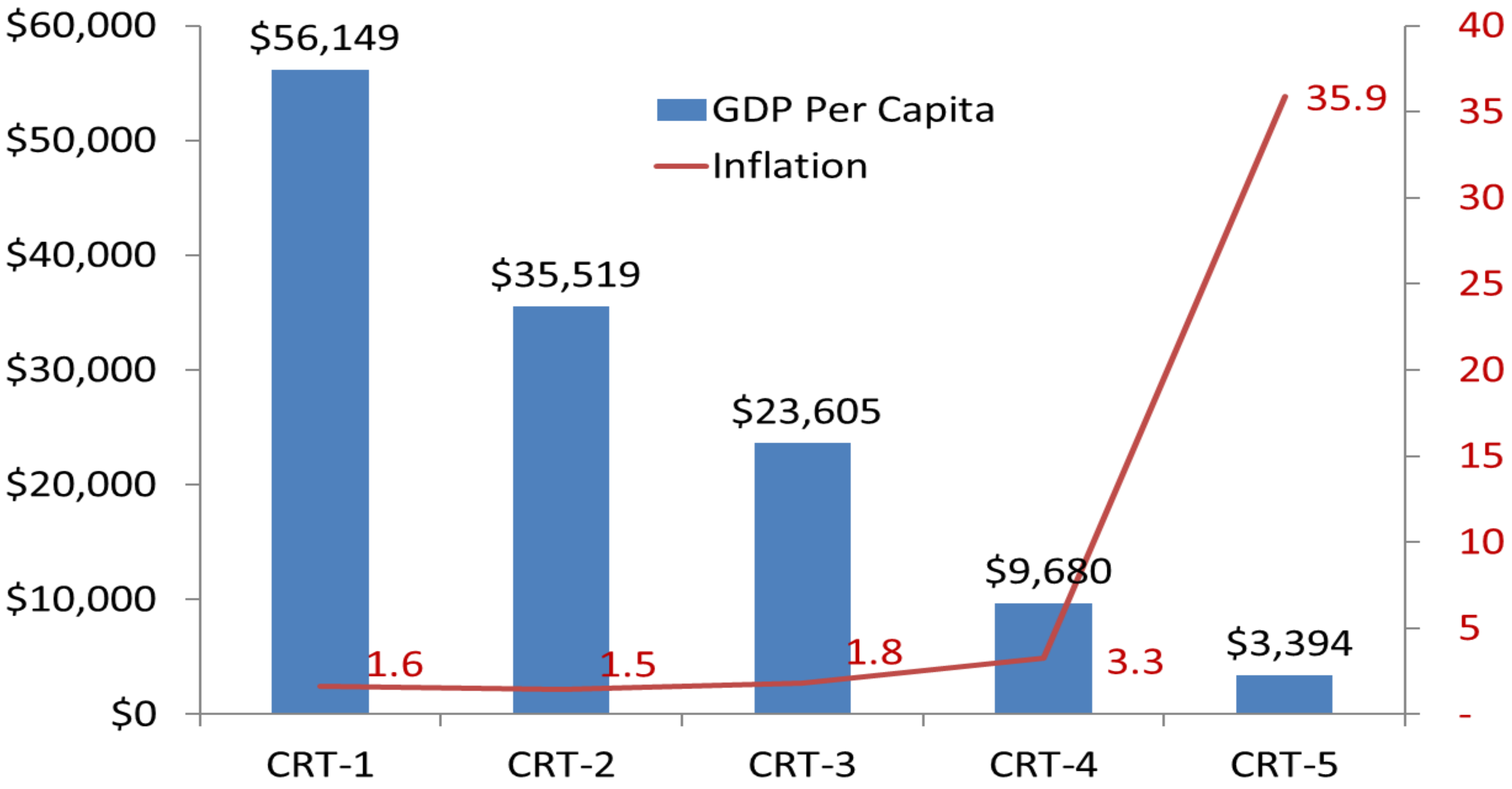
Economic risk is the likelihood that fundamental weaknesses in a country’s economy will cause adverse developments for an insurer

Country Risk Tiers – Economic Risk

Factors:

- State of the domestic economy
  - Economic size
  - Wealth of a country
  - Inflation
- Prospects
  - Currency change
  - Foreign direct investment
  - Forecast GDP growth
- Government finances
  - Budget
  - Debt
- International transactions
  - Foreign exchange reserves

Country Risk Tiers – Economic Risk



Country Risk Tiers – Political Risk

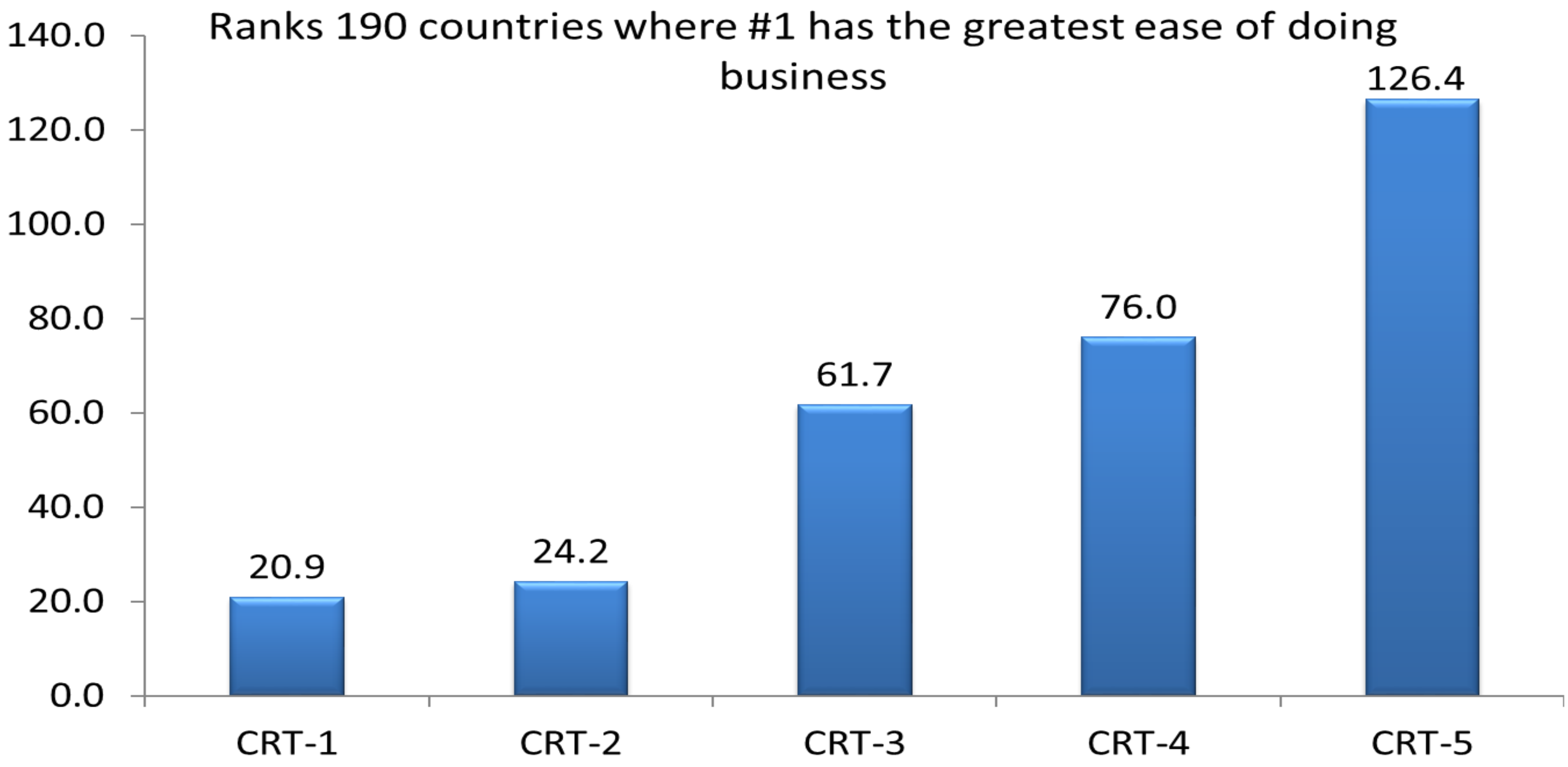
Political risk is the likelihood that governmental or bureaucratic inefficiencies, societal tensions, an inadequate legal system or international tensions will cause adverse developments for an insurer

Country Risk Tiers – Political Risk

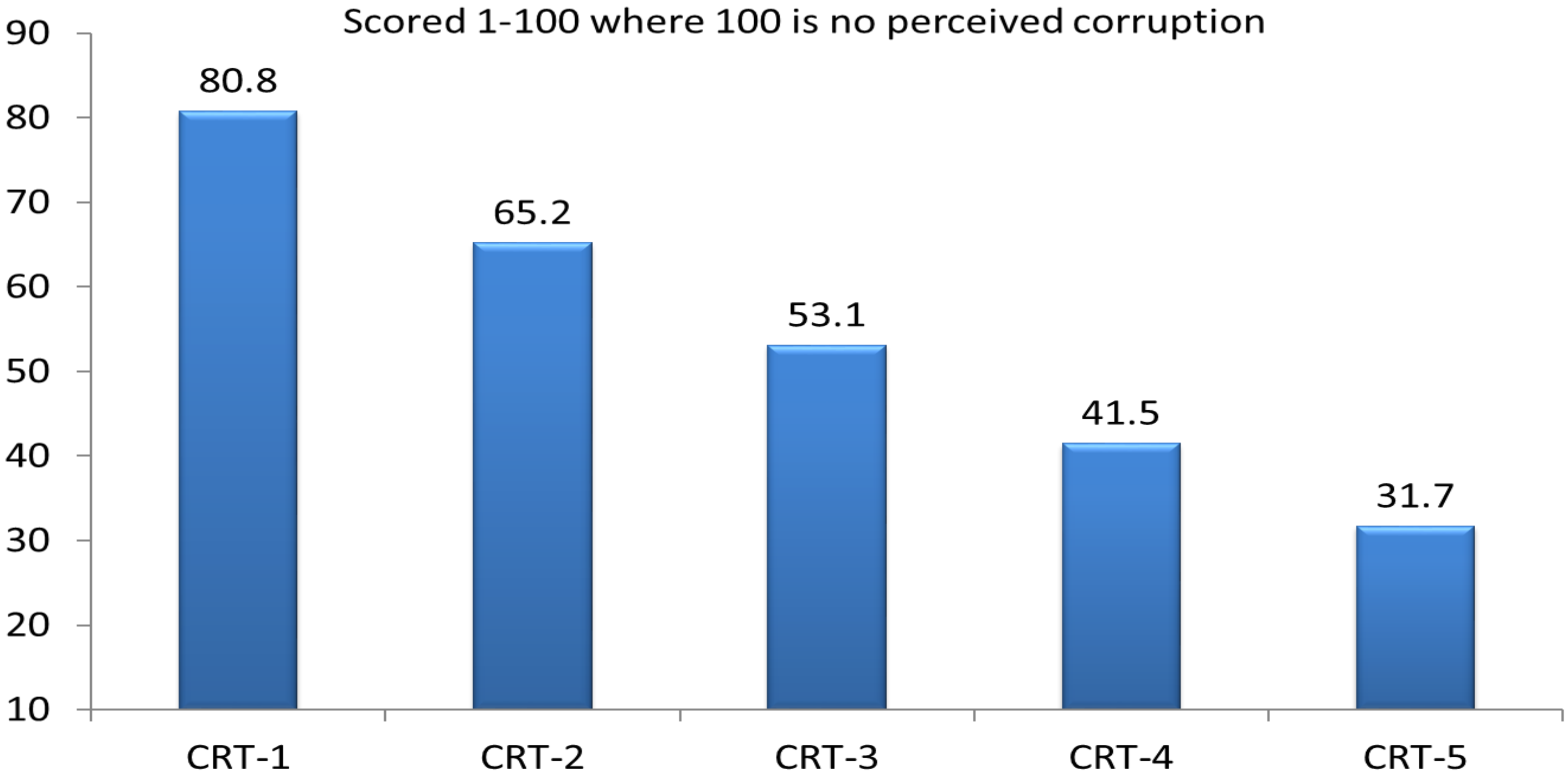
Factors:

- Business environment
  - How easy/difficult is it to do business?
- Strength of legal system
  - How prevalent is corruption?
  - Are property rights respected?
  - Are contracts enforceable?
- Government and Social Stability
  - How likely is government disruption?
  - Is there likely to be political or social unrest?

Country Risk Tiers – Political Risk



Country Risk Tiers – Political Risk



Country Risk Tiers – Financial System Risk (Non-Insurance)

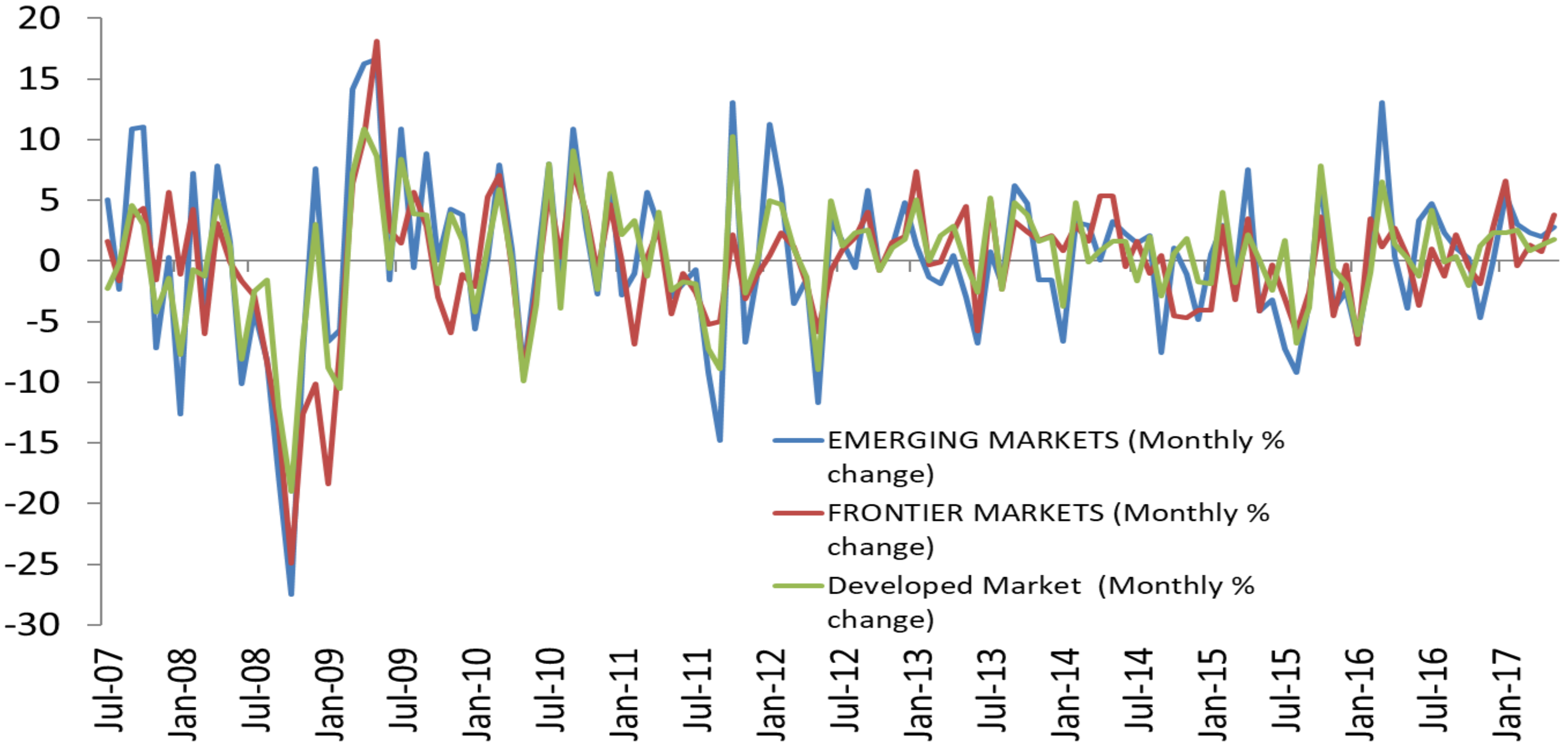
Financial system risk (non-insurance) is the likelihood that financial volatility may erupt due to inadequate reporting standards, weak banking systems, weak capital markets, or poor regulatory structure

Country Risk Tiers – Financial System Risk (Non-insurance)

Factors:

- Banking system stability
- Capital markets
- Reporting standards and regulation
- Sovereign credit risk
- Vulnerability of market

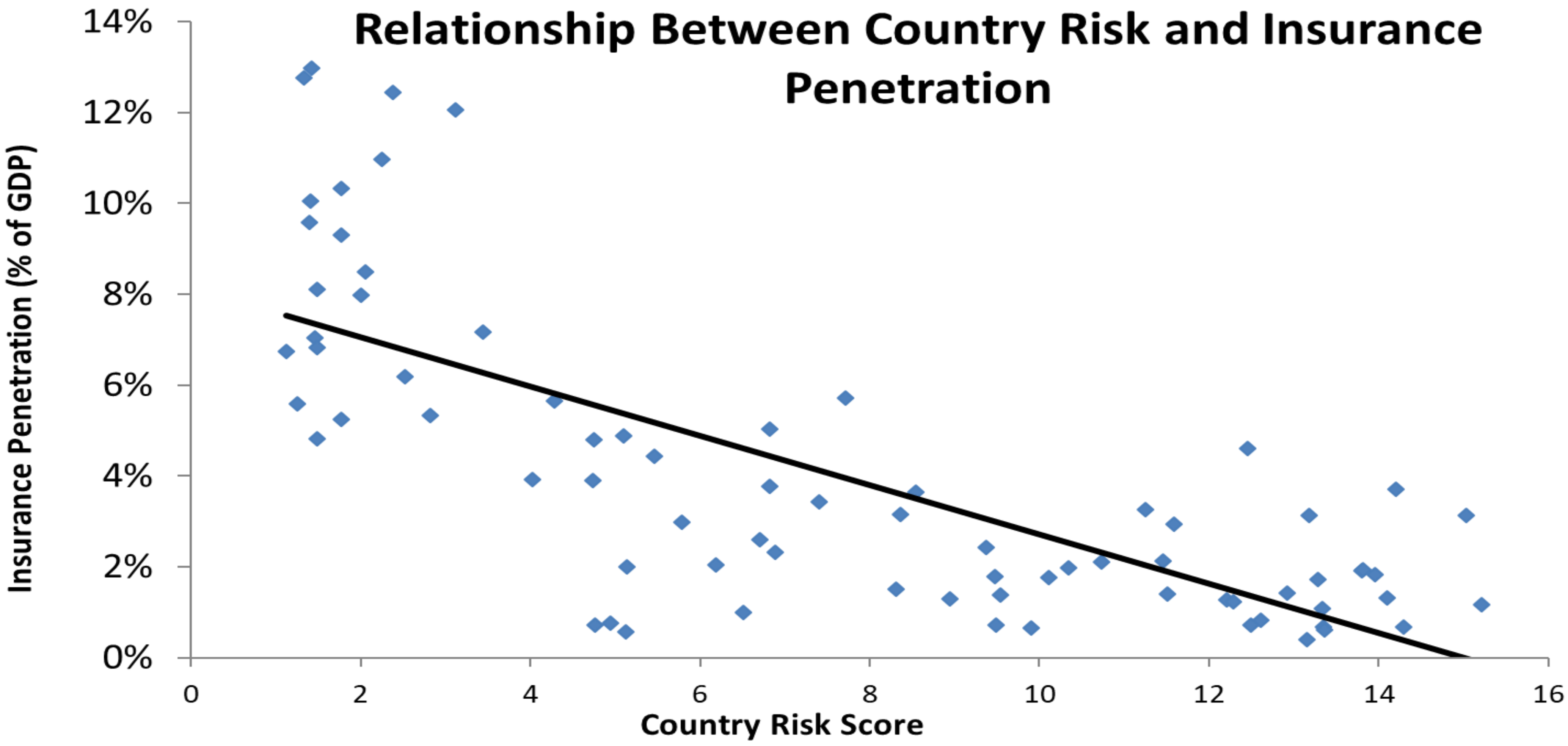
Country Risk Tiers – Financial System Risk (Non-insurance)



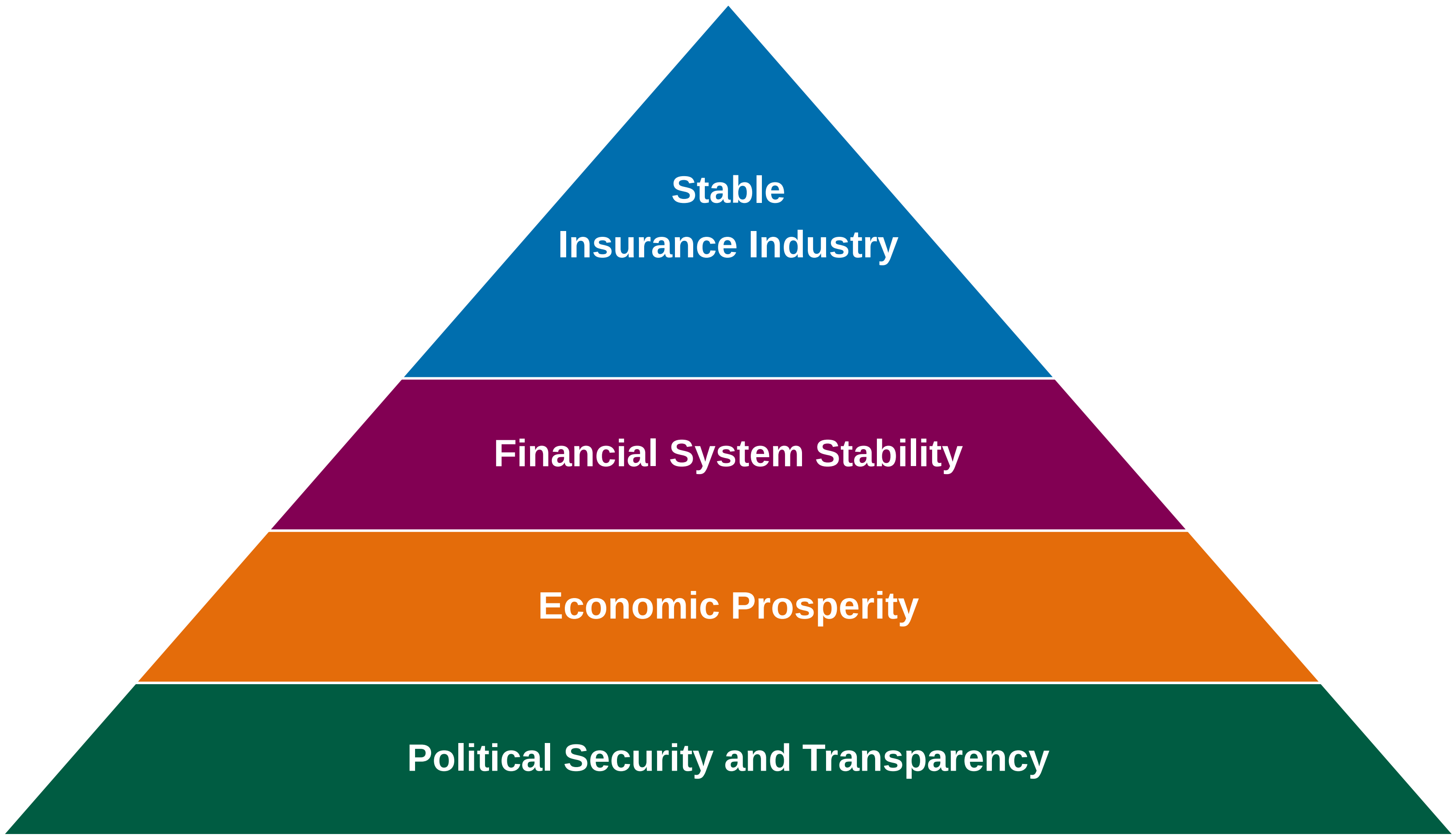
Country Risk Tiers – Financial System Risk (Insurance)

Financial system risk (insurance) is the sophistication of the insurance industry’s levels of development and public awareness; transparency and effectiveness of regulation; reporting standards; and regulatory sophistication will contribute to a volatile financial system and compromise an insurer’s ability to pay claims

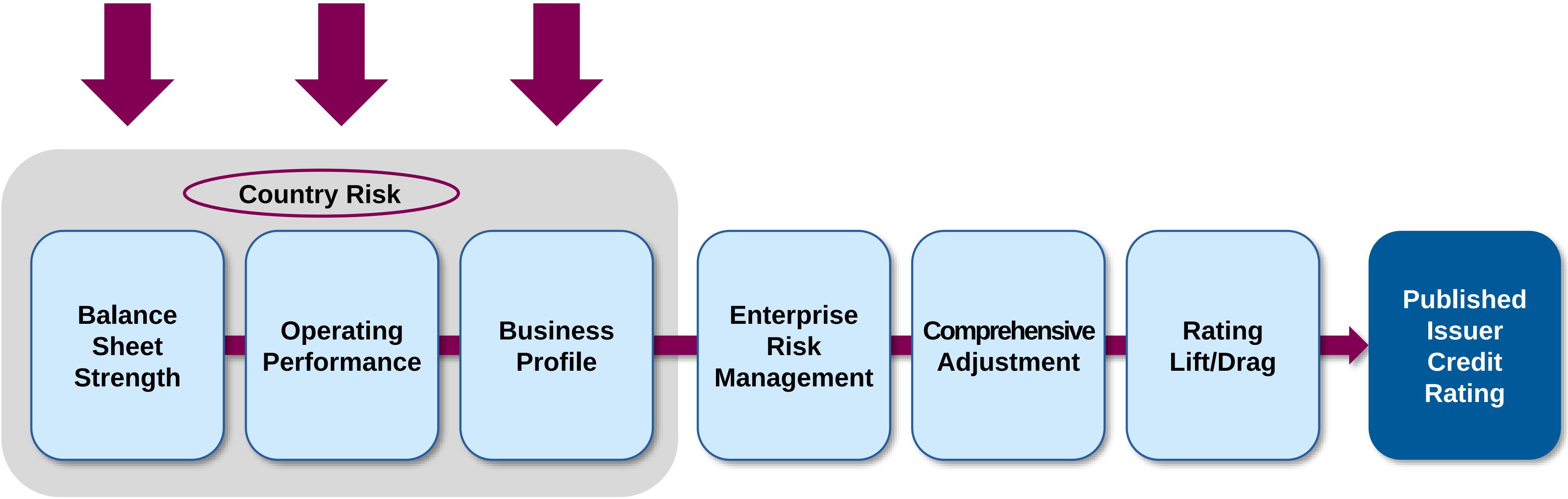
Country Risk Tiers – Financial System Risk (Insurance)



Country Risk Tiers



Country Risk Impact on Rating Process



Country Risk Impact on Rating Process

Combined Balance Sheet Assessment (Rating Unit/Holding Company)	Country Risk Tier				
	CRT-1	CRT-2	CRT-3	CRT-4	CRT-5
Strongest	a+/a	a+/a	a/a-	a-/bbb+	bbb+/bbb
Very Strong	a/a-	a/a-	a-/bbb+	bbb+/bbb	bbb/bbb-
Strong	a-/bbb+	a-/bbb+	bbb+/bbb/bbb-	bbb/bbb-/bb+	bbb-/bb+/bb
Adequate	bbb+/bbb/bbb-	bbb+/bbb/bbb-	bbb-/bb+/bb	bb/bb-	bb/bb-/b+
Weak	bb+/bb/bb-	bb+/bb/bb-	bb-/b+/b	b+/b/b-	b/b-/ccc+
Very Weak	b+ and below	b+ and below	b- and below	ccc+ and below	ccc and below

Country Investment Classes (CICs)

- CIC are designed to better quantify risk within the BCAR model. It allows the analytical team to increase risk considered within an insurance company's invested assets which could diminish financial flexibility
- Measures
  - Market illiquidity
  - Market volatility

Country Investment Classes (CICs)

- Countries are categorized into one of five Country Investment Classes
  - CIC 1 represents economies with relatively stable and liquid capital markets
  - CIC 5 represents markets with the least liquidity and highest volatility
- CIC’s Allow for Stress Testing with Various Parameters
  - Asset valuation haircuts on various asset classes (bonds, equities and real estate, etc.)
  - Increased risk charges
  - Interest rate shocks

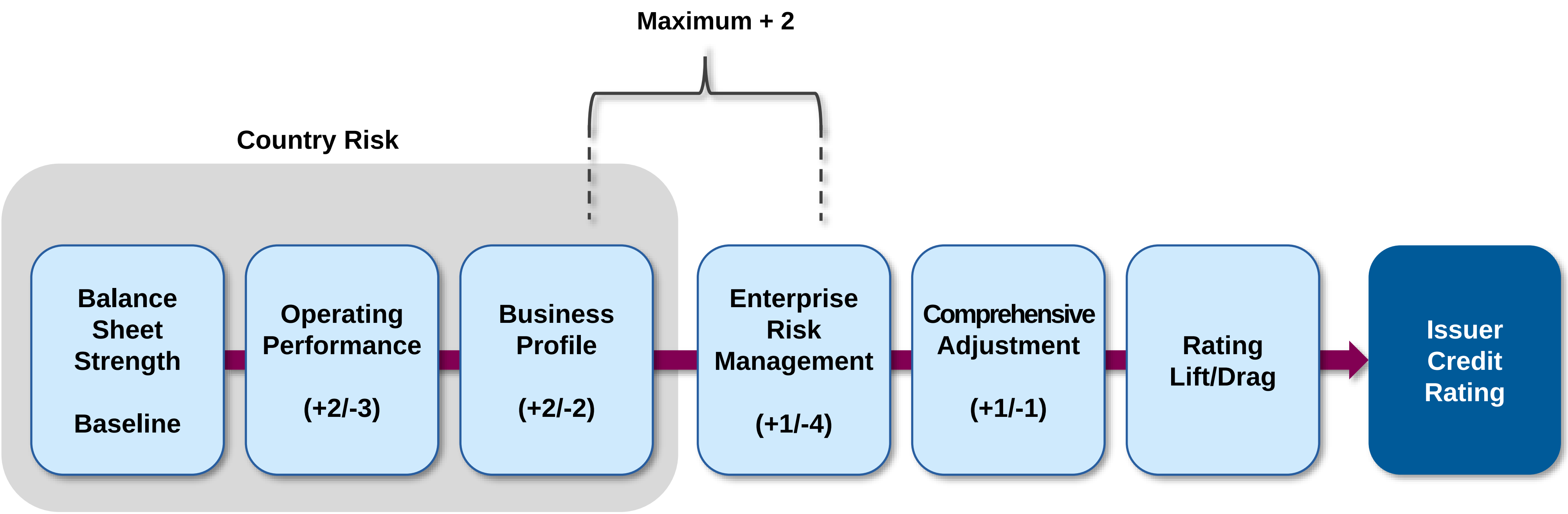
Country Investment Classes (CICs)

- Investment risk charges are scaled up in the Universal BCAR based on asset's origin, not the companies domicile, using the following table

Investment risk charges are scaled up in the Universal BCAR based on asset's origin, not the companies domicile, using the following table:

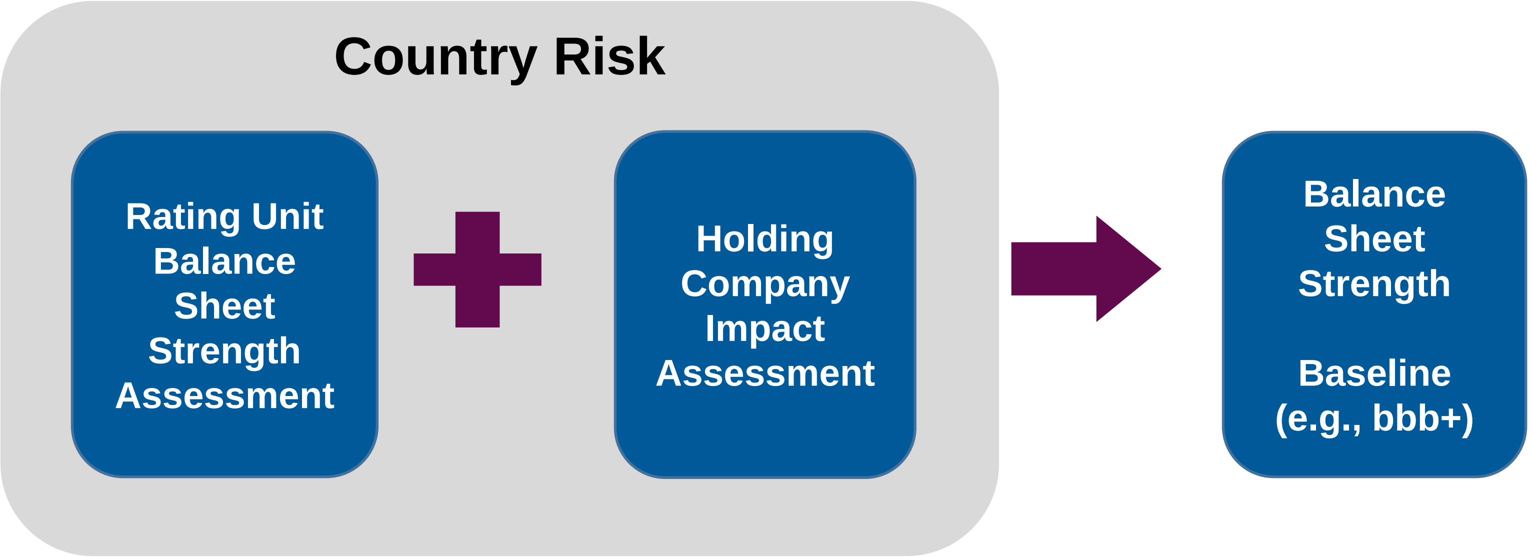
Asset Class	Risk Charge CIC 1	Relative Risk Charge CIC 2	Relative Risk Charge CIC 3	Relative Risk Charge CIC 4	Relative Risk Charge CIC 5
Bonds & Preferred Stocks	1.00	1.00	1.25	1.25	1.50
Common Stocks	1.00	1.00	1.25	1.25	1.50
Mortgage Loans	1.00	1.25	1.75	2.25	2.50
Real Estate	1.00	1.25	1.75	2.25	2.50
Cash & Short-term Investments	1.00	2.00	5.00	7.00	10.00

Best Credit Rating Methodology (BCRM)



Balance Sheet Strength

- Rating unit balance sheet strength assessment
  - BCAR
  - Other qualitative and quantitative factors
- Holding company impact assessment
- Country risk impact



Balance Sheet Strength - components

Rating Unit Review Components

BCAR	Quality of Capital
Stress Tests	Quality of Reinsurance
Liquidity	Reinsurance Dependence
Asset Liability Management	Appropriateness of Reinsurance Program
Internal Capital Models	Fungibility of Capital

Holding Company Review Components

Consolidated BCAR	Operating Leverage
Financial Flexibility/Liquidity	Financial Leverage
Coverage	Intangible Assets

Balance Sheet Strength: What is BCAR?

Best's Capital Adequacy Ratio (BCAR)

- A comprehensive quantitative tool that evaluates many of the risks (investment risks, underwriting risk, reserve risk) to the balance sheet simultaneously
- Generates an overall estimate of the required level of capital to support those risks and compares it with available capital

BCAR and the Building Blocks

BCAR is a key tool in the assessment of balance sheet strength

- Not the sole determinant of balance sheet strength
- Not the sole determinant of the rating

BCAR is also being used in ERM assessment

- Identify companies with tail risk
- Promote discussions of how companies identify, monitor, manage, measure, and protect policyholders from that risk

Overview of Available Capital & Risk Categories

$$\text{BCAR} = \frac{(\text{Available Capital} - \text{Net Required Capital})}{\text{Available Capital}} \times 100$$

Available Capital (AC)

Reported Capital (PHS)
Equity Adjustments:
- Unearned Premiums (DAC)
- Assets
- Loss Reserves
- Reinsurance

Debt Adjustments:
- Surplus Notes
- Debt Service Requirements

Other Adjustments:
- Future Operating Losses
- Goodwill & Intangible Assets
- Other

Net Required Capital

Gross Required Capital (GRC):
- (B1) Fixed Income Securities
- (B2) Equity Securities
- (B3) Interest Rate
- (B4) Credit
- (B5) Loss and LAE Reserves
- (B6) Net Premiums Written
- (B7) Business Risk
- (B8) Potential Catastrophe Loss

Covariance Adjustment

Net Required Capital (NRC)*

$$\text{Net Required Capital} = \sqrt{(B1)^2 + (B2)^2 + (B3)^2 + (.5 * B4)^2 + [(.5 * B4) + (B5)]^2 + (B6)^2 + (B8)^2} + (B7)$$

BCAR Guidelines

BCAR is the starting point in the assessment of <u>balance sheet strength</u>

VaR Level (%)	BCAR	BCAR Assessment
99.6	> 25 at 99.6	Strongest
99.6	> 10 at 99.6 & ≤ 25 at 99.6	Very Strong
99.5	> 0 at 99.5 & ≤ 10 at 99.6	Strong
99	> 0 at 99 & ≤ 0 at 99.5	Adequate
95	> 0 at 95 & ≤ 0 at 99	Weak
95	≤ 0 at 95	Very Weak

*** Companies with < 20 million USD in capital & surplus cannot score in strongest category**

BCAR Models

- US PC
- Canadian PC
- US Title
- Universal
- US LH (Life/Annuity)
- Canadian LH
- US HA (Health)
- US XA (Combined Life and Health Filers)

What is the Universal BCAR model used for?

Universal BCAR

- Used in evaluation of Balance Sheet Strength for those companies that do not file U.S. or Canadian statutory statements
- Used in the evaluation of Balance Sheet Strength at the Insurance Holding Company Level regardless of domicile or accounting standard
- Used to evaluate the prospective Balance Sheet Strength of start-up insurers based on their proposed business plans

Country Investment Classes in BCAR market risk components

- 5 Country Investment Classes (CICs):
  - Class 1: economies with relatively stable & liquid capital markets
  - Class 5: economies with the least liquidity & highest volatility

1	2	3	4	5

  - CIC relativities are based on relative volatility and liquidity for an asset class in a country with a given CIC to that of an asset class in a country with CIC 1 (e.g. US).
  - CIC relativities can be thought of as a “conversion factor” from asset risk factors in a CIC 1 country like the US to asset risk factors in a different CIC country.

CIC Relativities and Asset Capital Factors (B1 and B2)

- CIC Relativities vary from roughly 1.0 (CIC 1) to 1.5 (CIC 5) for bonds, preferred stocks, and common stocks. For mortgage loans, real estate, and other assets that also carry significant liquidity risk, these CICs vary from 1 to 10. CICs in general can vary by VaR but in most cases, they do not.
- Baseline Asset Risk Factor = Baseline Capital Factor x weighted average CIC relativity
- Example: BBB bonds held in the following proportions: 7% CIC 1, 8% CIC 2, 15% CIC 3, 30% CIC 4, 40% CIC 5

CIC relativities — 1.00, 1.00, 1.25, 1.25, 1.50

Weighted average CIC relativity — = 1.0 x .07 + 1.0 x .08 + 1.25 x .15 + 1.25 x .3 + 1.50 x .4 = 1.313

Baseline Capital Factors — Ex. Global Rating BBB: 3.6%, 4.6%, 4.9%, 5.0%, 5.4%

X Weighted average CIC relativity — 1.313

= Baseline Asset Risk Factor — 4.7%, 6.0%, 6.5%, 6.6%, 7.1%

Potential Premium (B6) & Reserve Risk (B5) Impact Due to Currency Shock or Hyperinflation

- Premium & Reserve Sizes are broken up into quartiles based on USD:
  - As the premium & reserve size increases, the baseline risk charges decrease due to inherent diversification in larger portfolios.
  - In a situation where depreciation is not a result of inflation (ppp & market forces ultimately will add inflationary pressure), in the short run, the company’s capital requirements may increase due to higher thresholds without an offsetting growth in premium and reserves.
    - As part of our interactive rating process, it is very important that the analyst be made aware of shocks like this that can impact balance sheet strength.
- In a situation of unanticipated hyperinflation, there could be significant adverse reserve development. This would ultimately be reflected in the loss reserve stability factor (more on this later). Additionally, with hyperinflation, premium & reserve risk charges would increase as a result of higher premiums and reserves as a consequence of inflation.
- Changes in the legal/judicial system abroad could also impact reserve volatility if unanticipated.

Holding Company Analysis in Balance Sheet Strength Assessment

Holding Company Impact

- Holding companies & their capital structures can have a significant impact on a subsidiary's overall financial strength and are therefore included in the analysis of BSS.
- HCs can provide subsidiaries with financial flexibility via capital infusions, access to capital markets, and additional cash flow from other operations.
- Conversely, debt and other securities can diminish the enterprise's financial flexibility, strain future earnings, and inhibit subsidiary surplus growth.

Lead Rating Unit	Holding Company: Positive	Neutral	Negative	Very Negative
Strongest	Strongest	Strongest	Very Strong	Adequate
Very Strong	Strongest	Very Strong	Strong	Weak
Strong	Very Strong	Strong	Adequate	Very Weak
Adequate	Strong	Adequate	Very Weak	Very Weak
Weak	Adequate	Weak	Very Weak	Very Weak
Very Weak	Weak	Very Weak	Very Weak	Very Weak

Company Adjustment – Country Risk May Impact Stability Factors Especially at the Holding Company Level

Reserve Risk: Risk of unanticipated adverse development on net loss & loss-adjustment expense (LAE) reserves

Reserve stability/volatility

Stable	Cumulative Case Incurred Link Ratios					
	12-24	24-36	36-48	48-60	60-72	72-84
2004	1.162	1.057	1.028	1.010	1.005	1.002
2005	1.158	1.055	1.026	1.010	1.004	1.002
2006	1.160	1.056	1.027	1.010	1.004	1.002
2007	1.172	1.059	1.025	1.009	1.003	1.002
2008	1.181	1.055	1.026	1.009	1.004	
2009	1.178	1.055	1.023	1.010		
2010	1.165	1.051	1.024			
2011	1.158	1.052				
2012	1.171					
All Yr Avg	**1.167**	**1.055**	**1.025**	**1.010**	**1.004**	**1.002**
Std Dev	**0.0082**	**0.0023**	**0.0017**	**0.0005**	**0.0007**	**0.0001**
CoV	**0.0070**	**0.0022**	**0.0017**	**0.0005**	**0.0007**	**0.0001**

Volatile	Cumulative Case Incurred Link Ratios					
	12-24	24-36	36-48	48-60	60-72	72-84
2004	1.345	1.040	1.100	1.109	1.038	1.009
2005	1.580	1.010	1.307	1.012	1.036	0.995
2006	1.598	1.043	1.023	1.021	1.015	0.998
2007	1.238	1.042	1.267	0.974	1.073	0.998
2008	1.014	1.365	0.998	1.003	1.094	
2009	1.452	1.027	1.013	1.006		
2010	1.165	1.097	1.010			
2011	1.147	1.011				
2012	1.112					
All Yr Avg	**1.295**	**1.079**	**1.102**	**1.021**	**1.051**	**1.000**
Std Dev	**0.1986**	**0.1110**	**0.1211**	**0.0422**	**0.0283**	**0.0052**
CoV	**0.1534**	**0.1029**	**0.1099**	**0.0413**	**0.0269**	**0.0052**

Coefficient of Variation (COV) = Std Dev / All Yr Avg

Company Adjustment Factor based on:
Company COV / Industry COV
0.70 <= Company Adjustment Factor <= 1.30

Company Adjustment to Reserve Capital Factors

Reserve Capital Factors: Represent potential ultimate UNANTICIPATED adverse loss and LAE reserve development (discounted) using VaR metric

Industry Baseline Reserve Capital Factors	Ex. Medium PAL: 16.9%, 25.0%, 28.1%, 29.1%, 32.0%

X

Company Stability Factor	1.20 (based on company's case incurred LDFs)

=

Company Reserve Capital Factors	20.3%, 30%, 33.7%, 34.9%, 38.4%

Notes:
Reserves represent business exposed to in the past.
Deficiency factor represents expected deficiency.
Reserves are discounted and net of reinsurance.

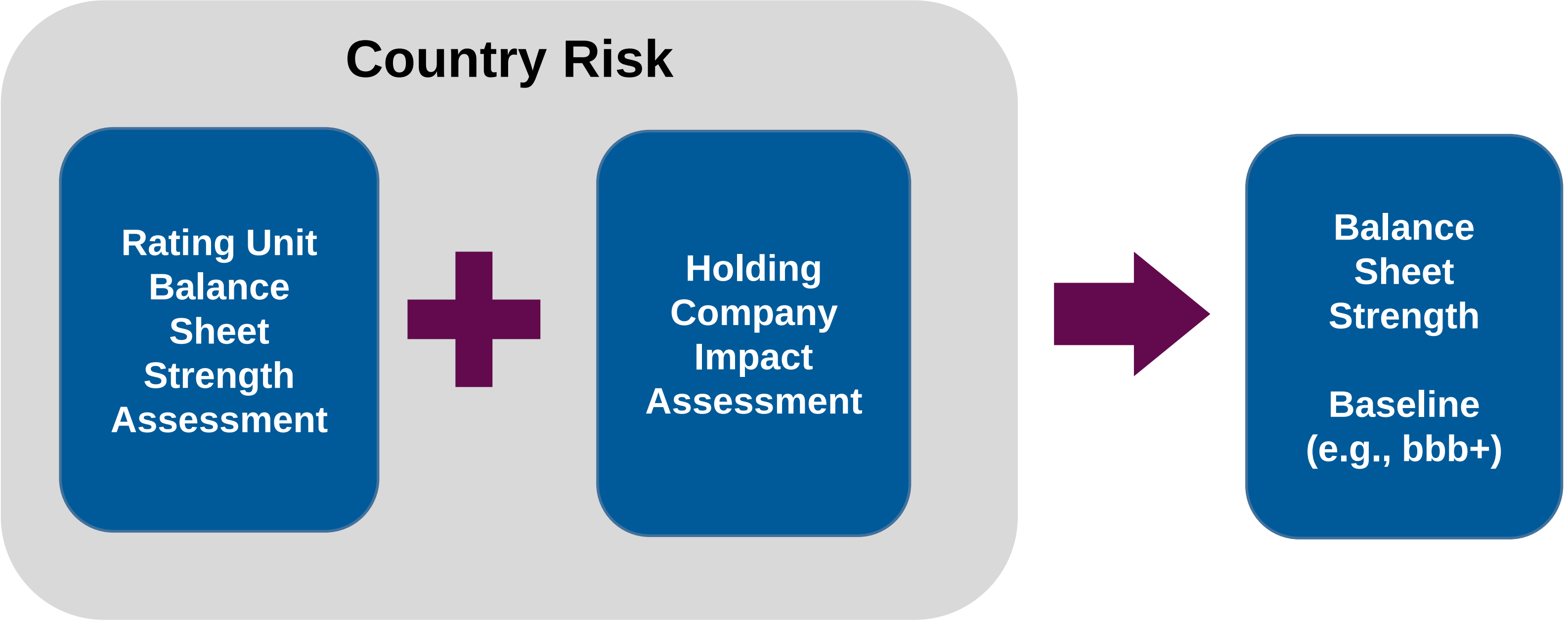
Country Risk Impact on Rating Process

Combined Balance Sheet Assessment (Rating Unit/Holding Company)	Country Risk Tier				
	CRT-1	**CRT-2**	**CRT-3**	**CRT-4**	**CRT-5**
Strongest	a+/a	a+/a	a/a-	a-/bbb+	bbb+/bbb
Very Strong	a/a-	a/a-	a-/bbb+	bbb+/bbb	bbb/bbb-
Strong	a-/bbb+	a-/bbb+	bbb+/bbb/bbb-	bbb/bbb-/bb+	bbb-/bb+/bb
Adequate	bbb+/bbb/bbb-	bbb+/bbb/bbb-	bbb-/bb+/bb	bb/bb-	bb/bb-/b+
Weak	bb+/bb/bb-	bb+/bb/bb-	bb-/b+/b	b+/b/b-	b/b-/ccc+
Very Weak	b+ and below	b+ and below	b- and below	ccc+ and below	ccc and below

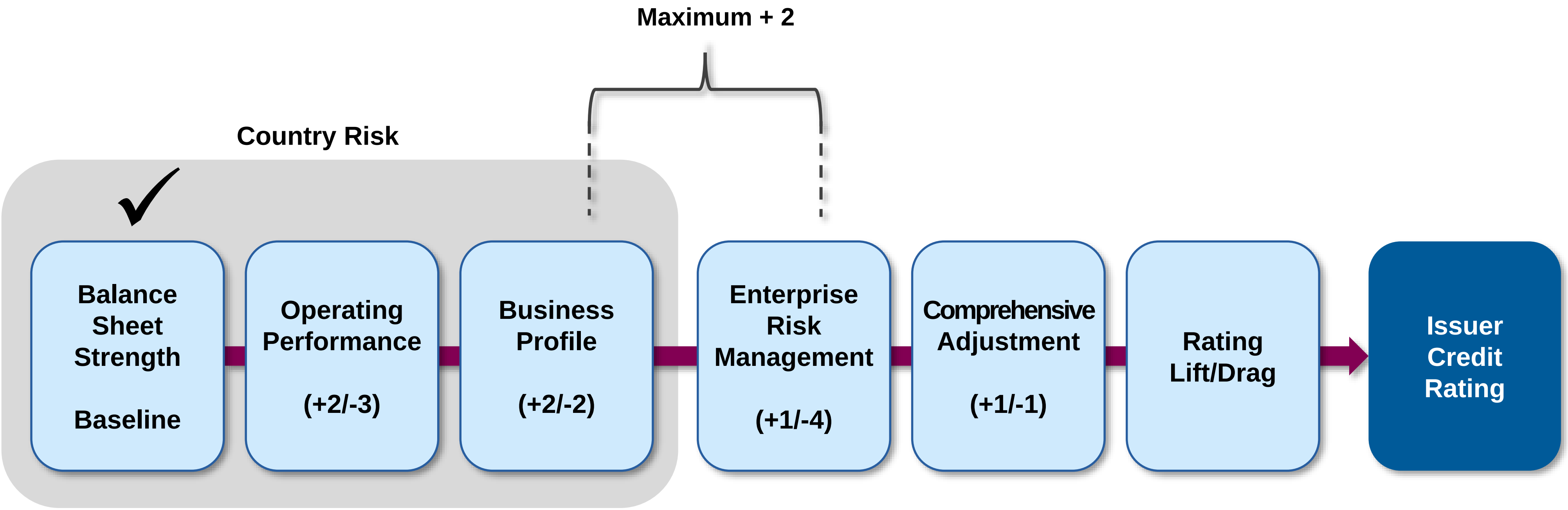
The lower baseline assessments for CRT-3 through CRT-5 countries reflect the heightened rate at which balance sheet strength can erode in these countries due to country-specific factors. A blending is done for companies with exposures and operations across multiple risk tiers.

Balance Sheet Strength

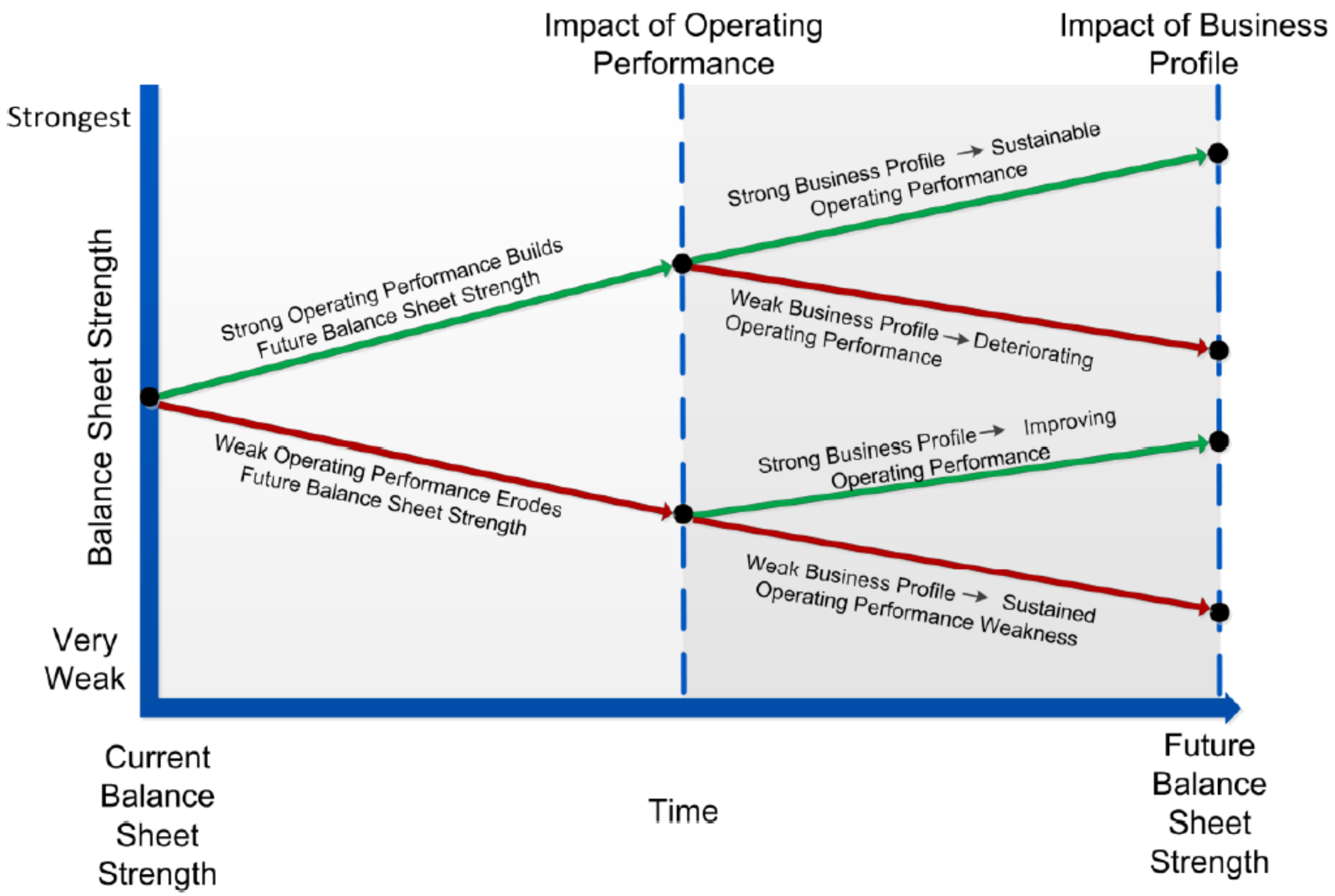
- Rating unit balance sheet strength assessment
  - BCAR
  - Other qualitative and quantitative factors
- Holding company impact assessment
- Country risk impact



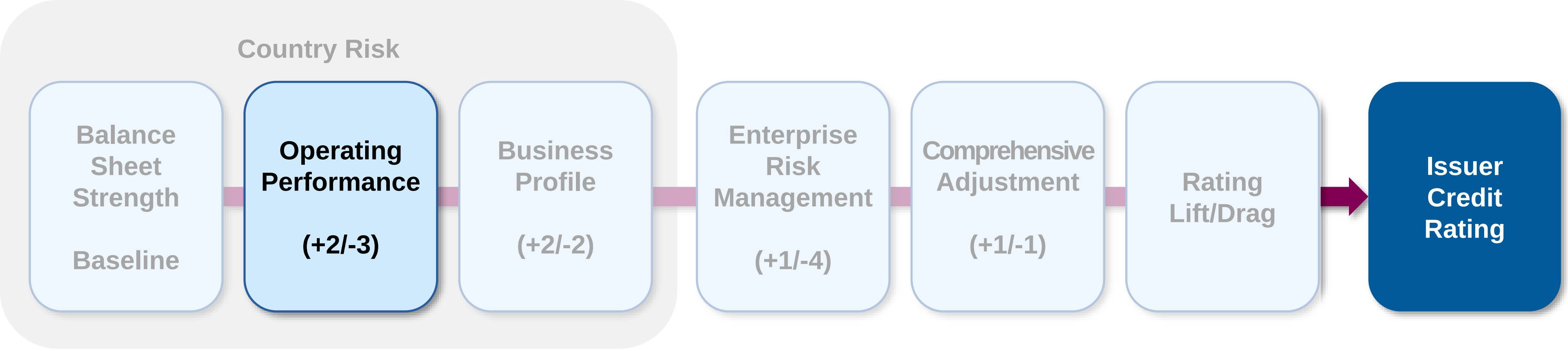
Best Credit Rating Methodology (BCRM)



Balance Sheet Strength is a starting point



BCRM Building Blocks: Operating Performance



Operating Performance Components	
• Change in NPW	• Pre-Tax Total Return
• Change in Total Reserves	• Pre-Tax Operating ROR
• Financial Forecasts/Plans	• Operating ROE
• Combined Ratio	

Industry specific Operating Performance Components

Property/Casualty and Health Review Components

Underwriting Performance	*Investment Performance*	*Total Operating Earnings*
Loss Ratio	Net Yield	Pre-Tax Operating ROR
Expense Ratio	Pre-Tax Total Return	Operating ROE
Combined Ratio		
Operating Ratio (P/C Only)		

Life/Health Review Components

Underwriting Performance	*Investment Performance*	*Total Operating Earnings*
Change in NPW & Deposits	Net Yield	NOG to Total Assets
Change in Total Reserves	Pre-Tax Total Return	NOG to Total Revenue
		Operating ROE

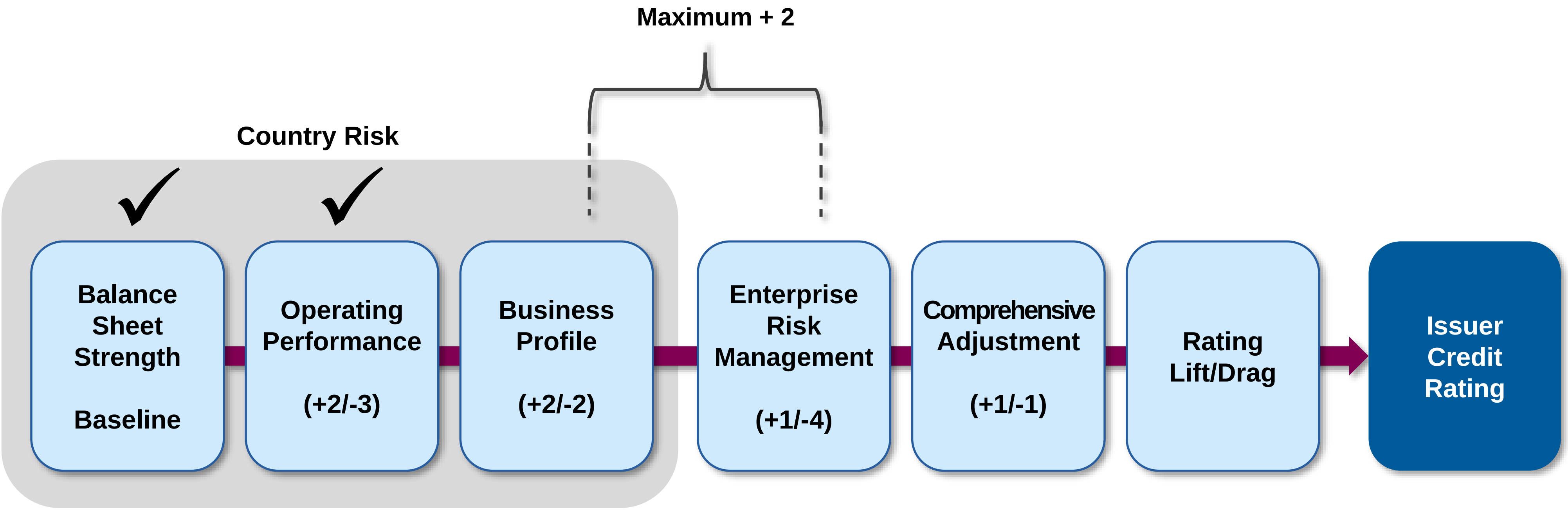
Country Risk Impact on P/C Operating Performance Metrics

- Exposure to economic/regulatory/country risk factors are important for evaluating profitability.
- Degree of volatility in earnings and the potential impact of this volatility on future capitalization and balance sheet strength are items of interest to the rating analysts when determining a rating.
- Judicial/legal system changes abroad can cause potential shocks in litigation expenses/expenses to meet regulatory requirements, one time asset liquidations, and changes in hedging methods.
- Macroeconomic instability in higher CRT countries can cause inflationary shocks and subsequent currency impacts (e.g. depreciation due to inflation), volatile business cycles, and liquidity shocks.
    - Would result in poor investment yield performance, volatile and poor ROE performance, volatile and poor ROR performance, and unprofitable and volatile operating ratios (lower investment yields, adverse selection due to potential limited ability to increase rates, greater propensity to file claims in a downturn, unexpectedly high claim severities, etc.)

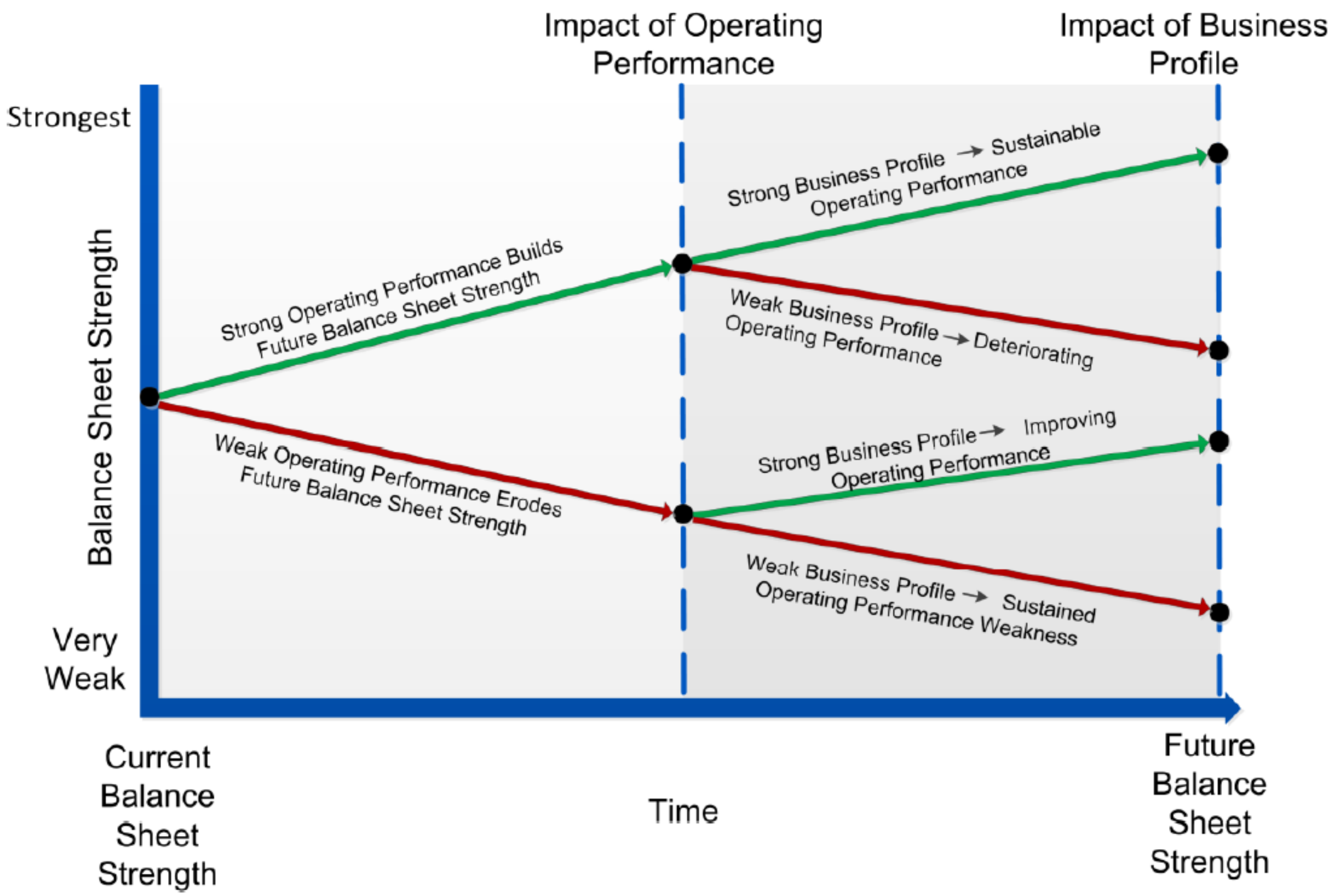
Operating Performance Assessment

Assessment	Notches	Key Characteristics
Very Strong	+2	Historical operating performance is exceptionally strong and consistent. Trends are positive and prospective operating performance is expected to be exceptionally strong. Volatility of key metrics is low.
Strong	+1	Historical operating performance is strong and consistent. Trends are neutral/slightly positive and prospective operating performance is expected to be strong. Volatility of key metrics is low to moderate.
Adequate	0	Historical operating performance and trends are neutral. Prospective operating performance is expected to be neutral. Volatility of key metrics is moderate.
Marginal	-1	Historical operating trends have been inconsistent. Trends are neutral/slightly negative with some uncertainty in perspective operating performance. Volatility of key metrics is moderate to high.
Weak	-2	Historical operating performance is poor. Trends are slightly negative and prospective operating performance is expected to be poor. Volatility of key metrics is high.
Very Weak	-3	Historical operating performance is very poor. Trends are negative and prospective operating performance is expected to be very poor. Volatility of key metrics is very high.

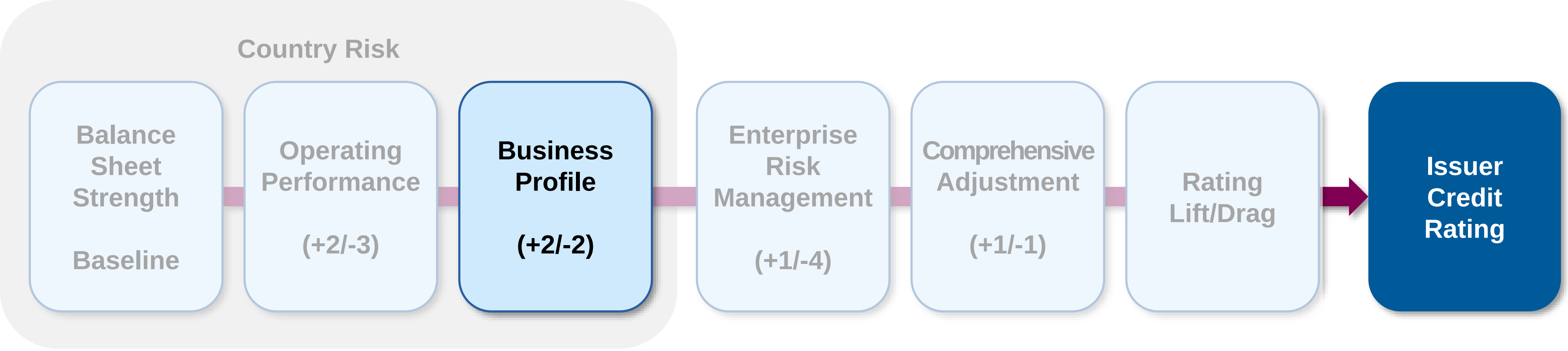
Best Credit Rating Methodology (BCRM)



Balance Sheet Strength is a Starting Point



BCRM Building Blocks: Business Profile



Business Profile Components	
• Market Position	• Management Quality
• Pricing Sophistication & Data Quality	• Regulatory, Event, and Country Risks
• Product Risk	• Distribution Channels
• Degree of Competition	• Product/Geographic Concentration

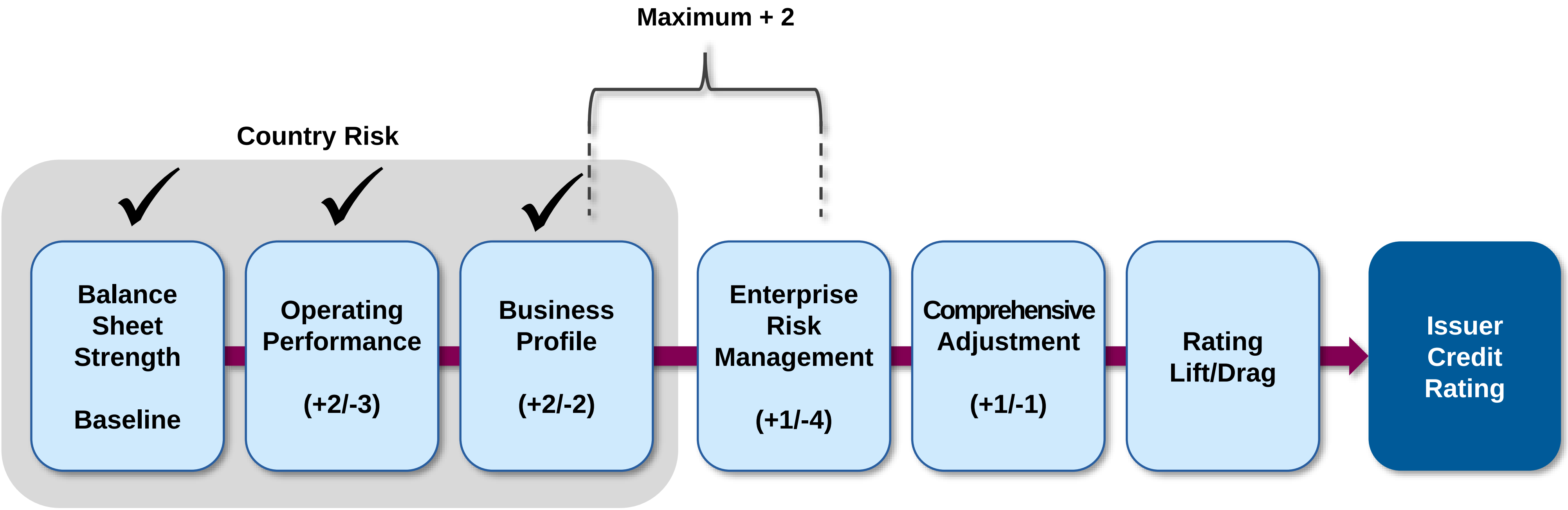
Country Risk Impact on Business Profile

- Market position and degree of competition can be impacted by the country’s financial and regulatory systems. A sizeable market share may not necessarily be favorable if rates are inadequate. Degree of competition has to do with the presence of other market participants. A 50% market share in a small country can still indicate high competition (less favorable) if for example, there is a duopoly.
- In less developed countries, in non-diversified, non-global insurers, pricing is likely not going to be as sophisticated and not likely going to be subject to regulatory review (recall regulators have a dual mandate: 1) to ensure ability to pay claims – rate adequacy. 2) ensure that rates are not unfairly discriminatory).
- Product/Geographic concentration can be unfavorable for insurers operating in regions that are more subject to terrorism and other non-fortuitous events that result in large insured losses.
- Product Risk may result in high CRT regions due to less need for less risky products due to a relatively underdeveloped financial system. Recall that insurance supports a growing financial system.
- The Regulatory, Event, and Country Risk component tends to be less favorable in higher CRT countries due to less developed insurance markets and opacity in contract enforceability, property rights, and ease of business. Greater risk of political turmoil and/or severe economic conditions could lead to volatile regulatory changes and make conducting business difficult.

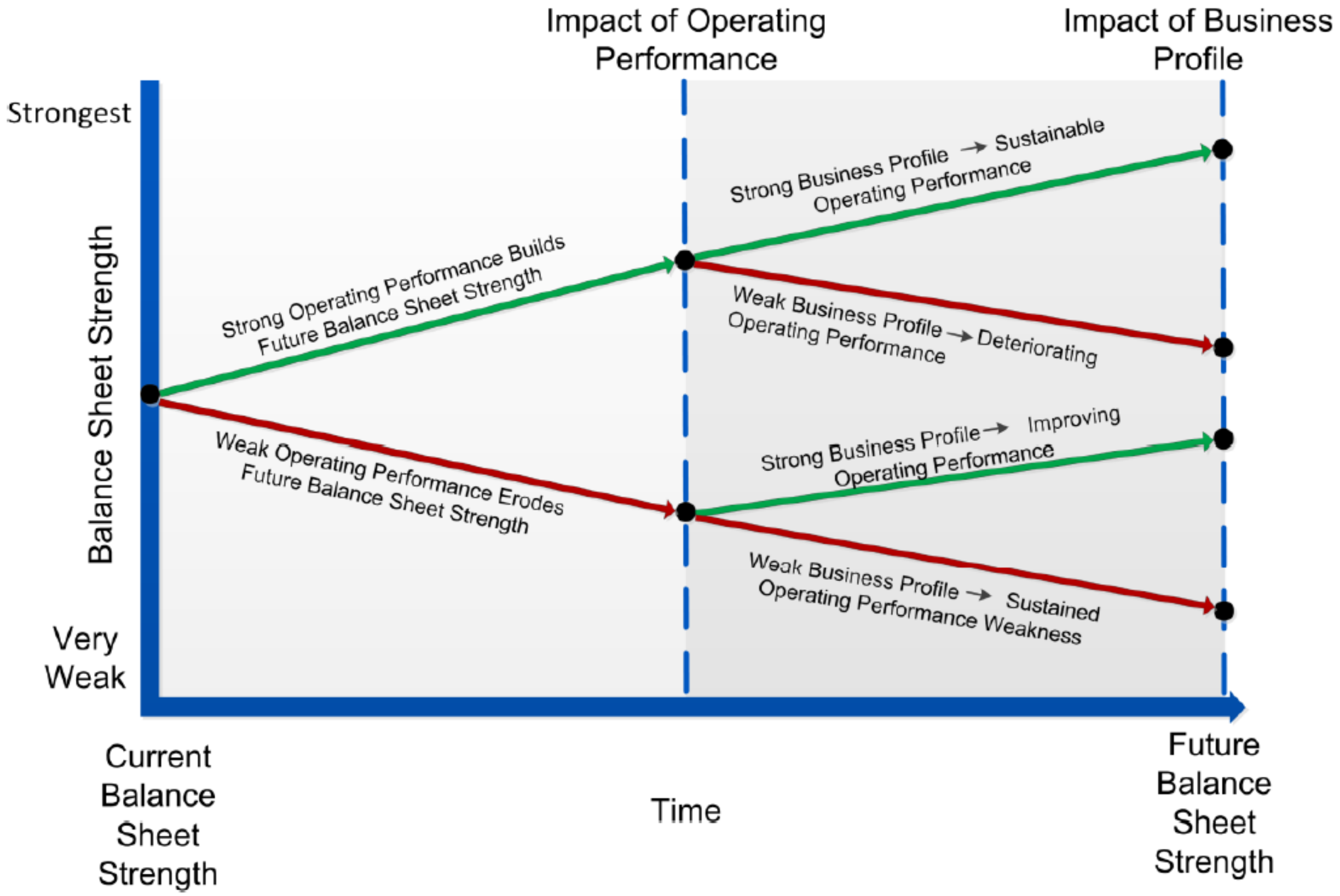
Business Profile Assessment

Assessment	Adjustment (Notches)	Key Business Profile Characteristics
Very Favorable	+2	The company's market leadership position is unquestionable, demonstrated, and defensible with high brand recognition. Distribution is seen as a competitive advantage; business lines are non-correlated and generally lower risk. Its management capabilities and data management are very strong.
Favorable	+1	The company is a market leader with strong business trends and good control over distribution. It has diversified operation sin key markets that have high to moderate barriers to entry with low competition. It has a strong management team that is able to meet projections and utilize data effectively.
Neutral	0	The company is not a market leader, but is viewed as competitive in chosen markets. It has some concentration and/or limited control of distribution. It has moderate product risk but limited severity and frequency of loss. Its use of technology is evolving and its business spread of risk is adequate.
Limited	-1	The company has a lack of diversification in geographic and/or product lines; its control over distribution is limited and undifferentiated. It faces high/increasing competition with low barriers to entry and elevated product risk. Management is unable to utilize data effectively or consistently in business decisions.
Very Limited	-2	The company faces high competition and low barriers to entry. It has high concentration in commodity or higher-risk products with very limited geographic diversity. It has weak data management. Country risk may factor into its elevated business profile risks.

Best Credit Rating Methodology (BCRM)



Balance Sheet Strength – Current and Future



Questions & Comments