



COUNTRY RISK: THE 2024 UPDATE!

The Flipside of Globalization!

The Lead In...

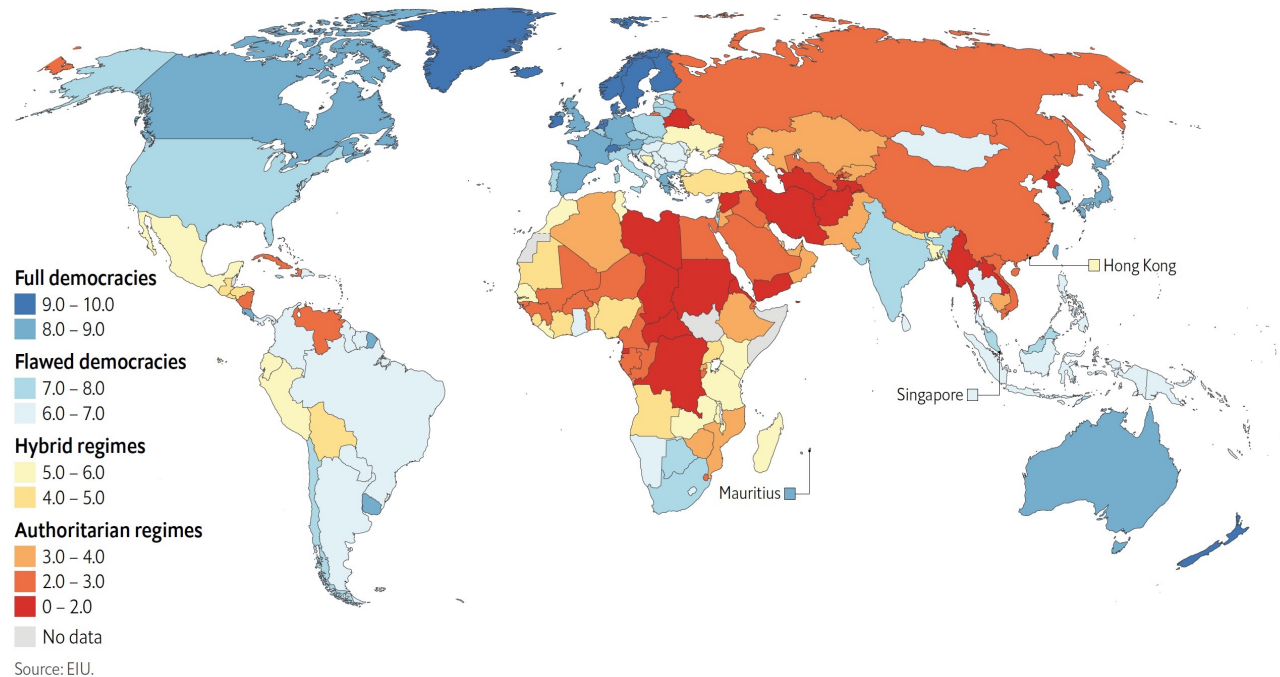
- After the 2008 market crisis, I resolved that I would be far less casual in my assessments and updating of equity risk premiums, in the United States and abroad, more aware of the damage that can be inflicted on intrinsic value by significant shifts in risk premiums, i.e., my definition of a crisis.
 - That precipitated my practice of estimating implied equity risk premiums for the S&P 500, at the start of every month, and following up of using those estimated premiums when valuing companies during that month.
 - The 2008 crisis also gave rise to two update papers that I do each year:
 - The first looks at equity risk premiums, what they measure, how they vary across time and how best to estimate them, which I last updated in March 2024.
 - The second is focused on country risk and how it varies across geographies, with the focus again on determinants, measures and estimation, which I update mid-year each year. This post reflects my most recent update from July 2024 of country risk.

Country Risk: Drivers

- At the risk of stating the obvious, investing and operating in some countries is much riskier than investing and operating in others, with the variations on multiple dimensions.
- Those variations in risk come from differences on four major dimensions:
 - ▣ Political structure
 - ▣ Exposure to war/violence
 - ▣ Extent of corruption
 - ▣ Protections for legal and property rights.

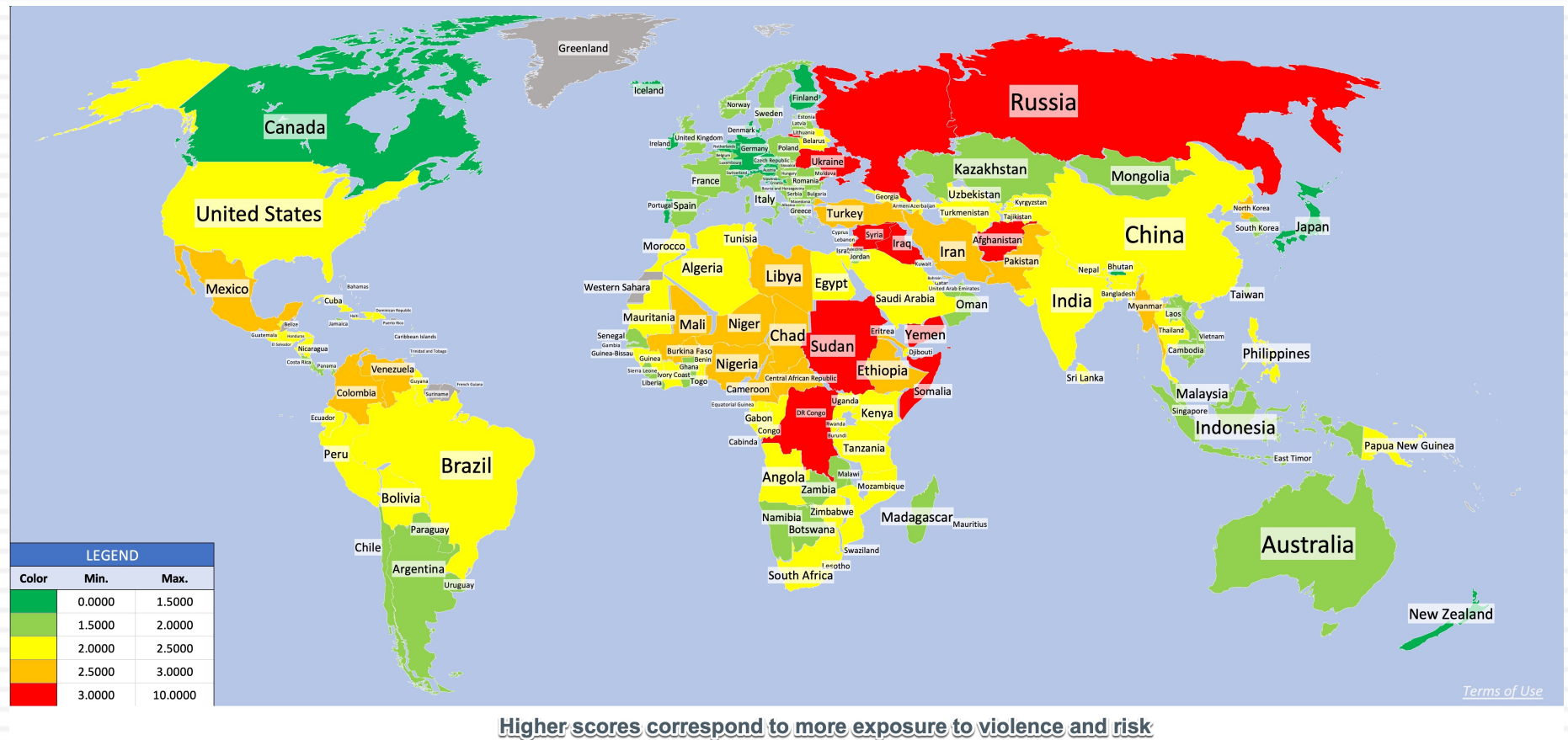
1. Political Structure

Democracy Index 2023, global map by regime type

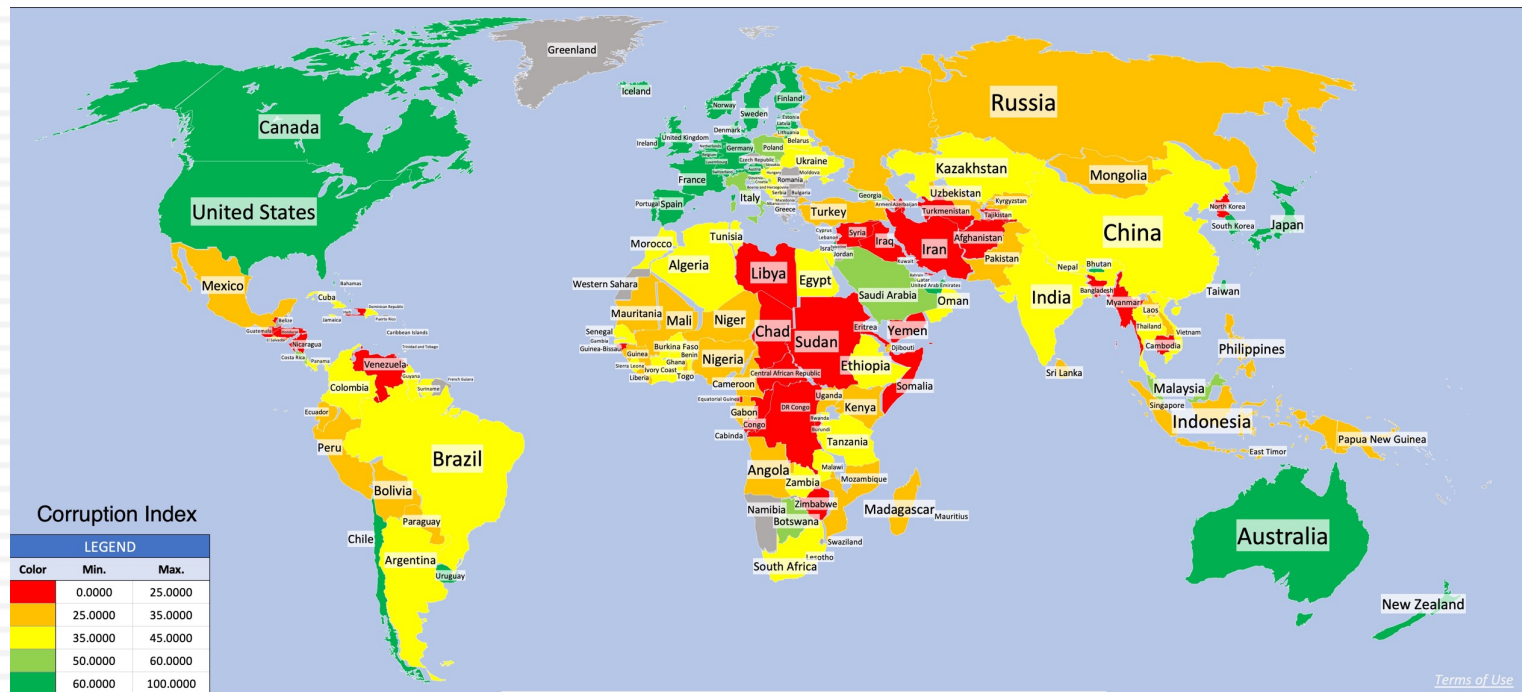


	EIU Democracy Index Score (Higher = More Democratic)				
	2006	2011	2016	2021	2023
Asia & Australasia	5.44	5.51	5.74	5.46	5.41
Eastern Europe & Central Asia	5.76	5.5	5.43	5.36	5.37
Latin America	6.37	6.35	6.33	5.83	5.68
Middle East & North Africa	3.53	3.62	3.56	3.41	3.23
North America	8.64	8.59	8.56	8.36	8.27
Western Europe	8.6	8.4	8.4	8.22	8.37
Sub-Saharan Africa	4.24	4.32	4.37	4.12	4.04
World	5.52	5.49	5.52	5.28	5.23

2. Exposure to violence

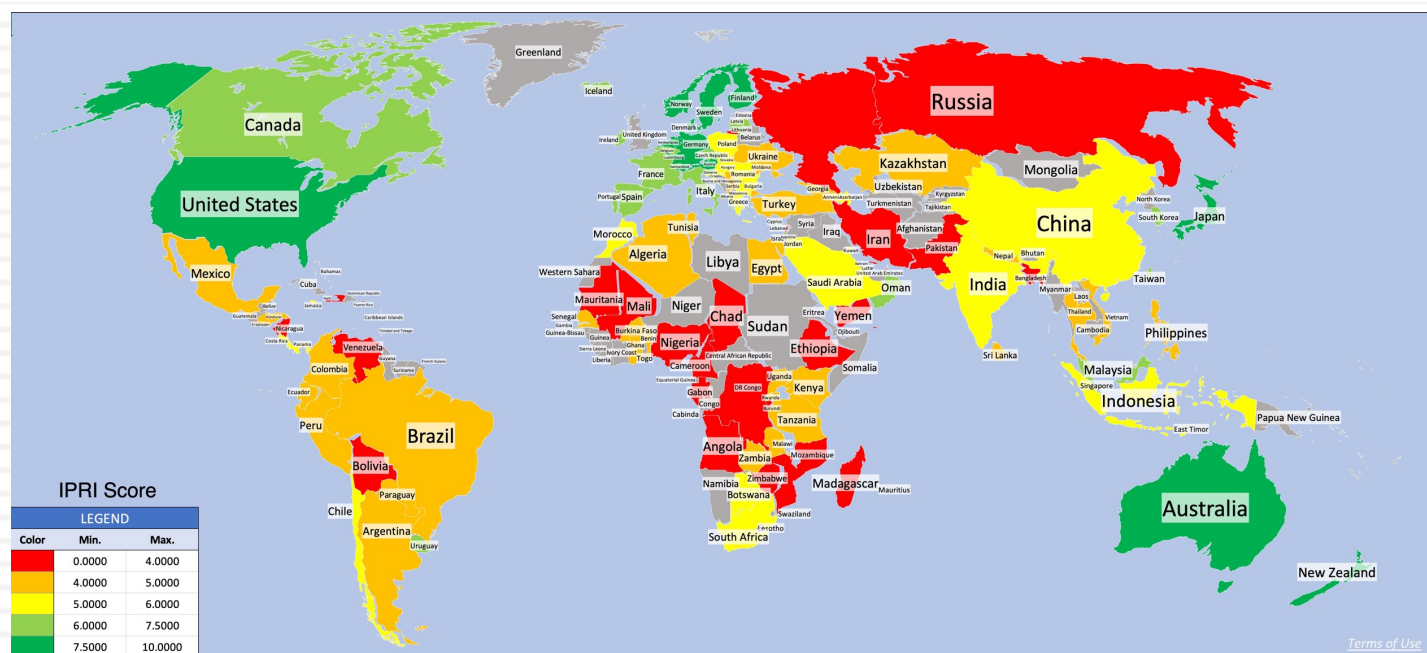


3. Extent of corruption



Least corrupt		Most corrupt	
Country	Corruption score	Country	Corruption score
Denmark	90	Somalia	11
Finland	87	South Sudan	13
New Zealand	85	Syria	13
Norway	84	Venezuela	13
Singapore	83	Yemen	16
Sweden	82	Equatorial Guinea	17
Switzerland	82	Haiti	17
Netherlands	79	Korea, North	17
Germany	78	Nicaragua	17
Luxembourg	78	Libya	18

4. Legal and Property rights



IPR: Composite Property Rights
 LP: Legal Property Rights
 PPR: Physical property rights
 IPR: Intellectual Property right

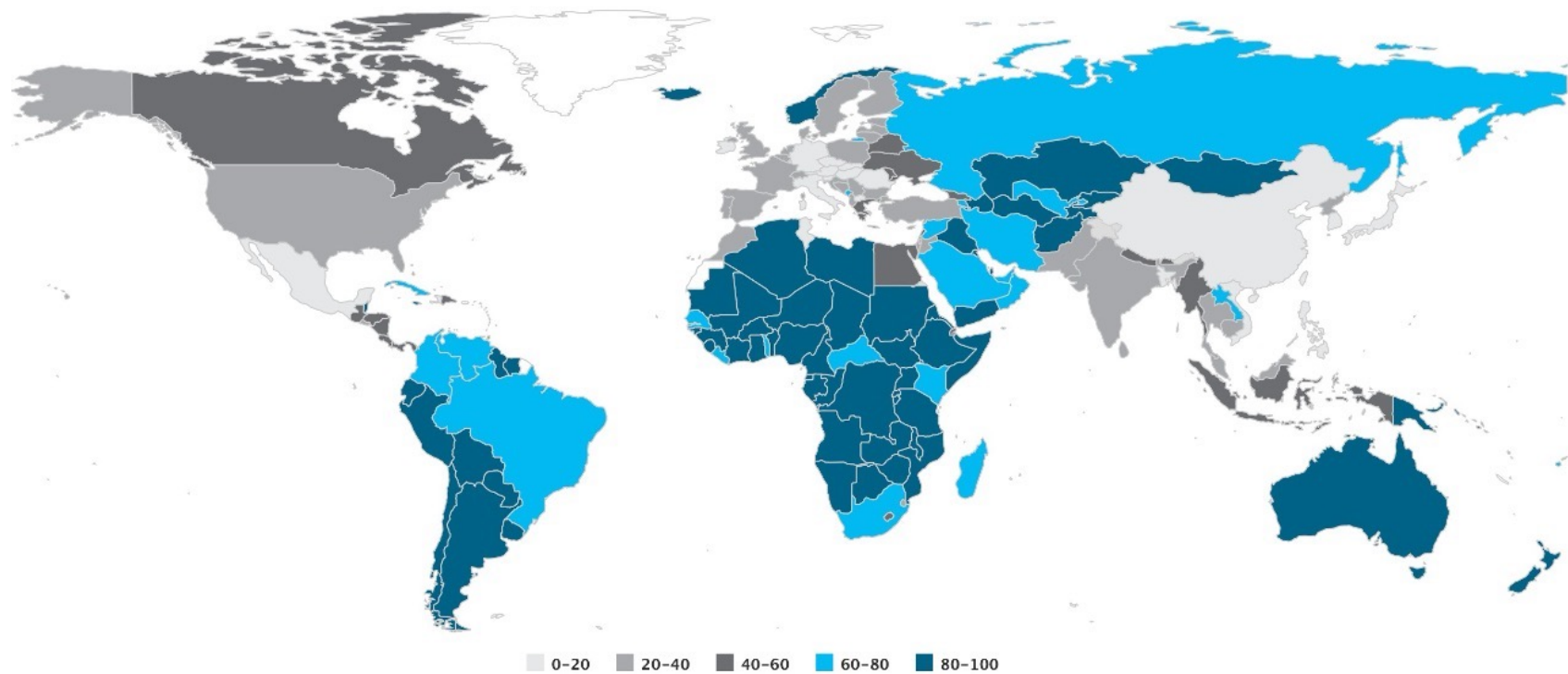
Region	IPRI	LP	PPR	IPR
Africa	4.146	3.726	4.254	4.459
Asia	5.264	4.913	5.736	5.142
Central America	4.490	4.154	4.366	4.949
European Union	6.564	6.956	6.119	6.618
North America	6.524	6.144	6.264	7.163
Oceania	7.740	8.407	7.572	7.242
Rest of Europe	5.351	5.172	5.341	5.541
South America	4.376	4.296	4.298	4.536

Response	Percentage
Yes, the current government is responsible	95%
No, the current government is not responsible	5%

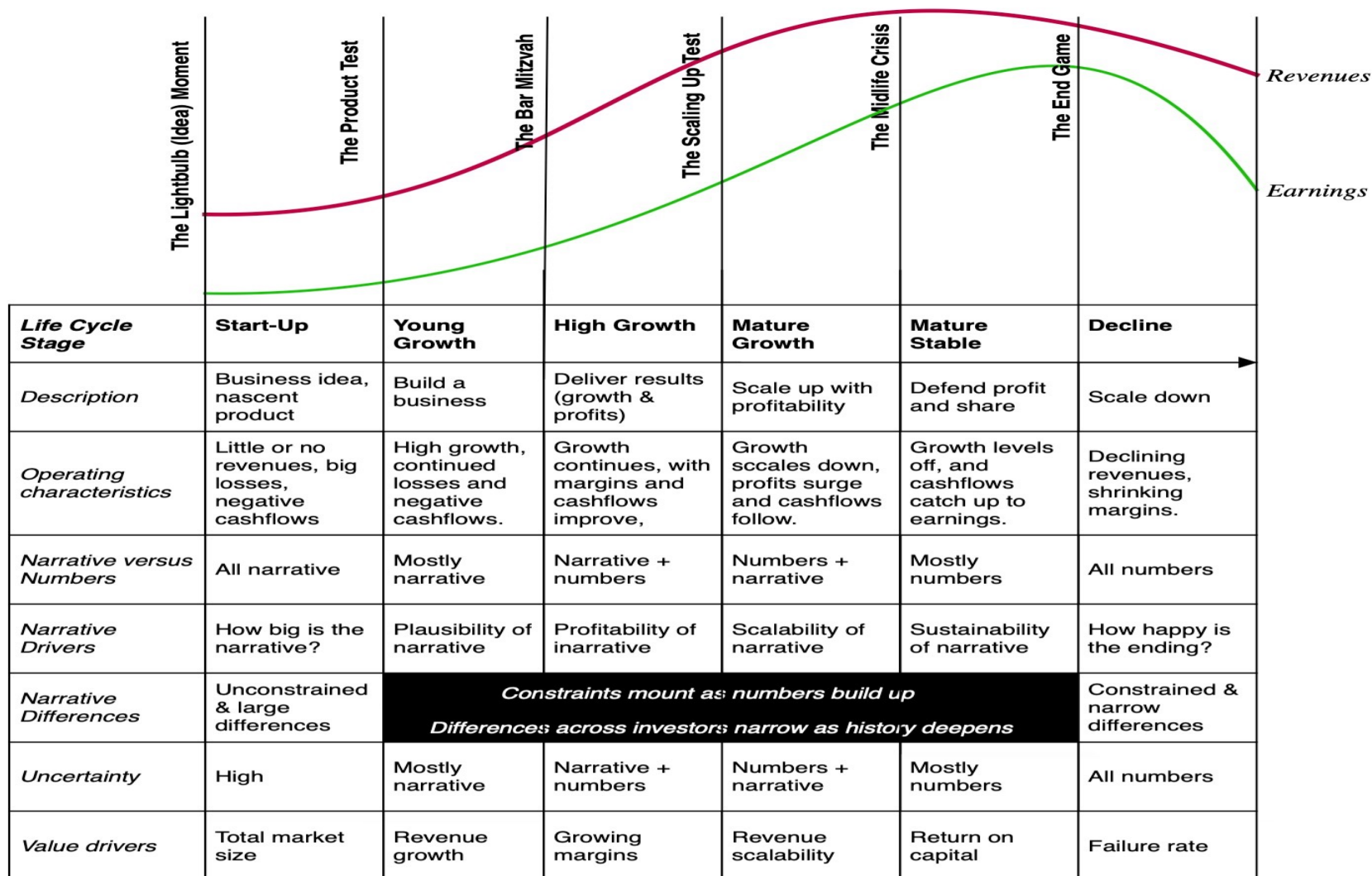
Country Risk: External Drivers

- Looking at the last section, you would not be faulted for believing that country risk exposure is self-determined, and that countries can become less risky by working on reducing corruption, increasing their legal protections for property rights, making themselves safer and working on their political structures.
- That is true, but there are three factors that are largely out of their control that can still drive country risk upwards.
 - ▣ Economic over-dependence on a commodity or commodities
 - ▣ Country's position in life cycle
 - ▣ Climate Change

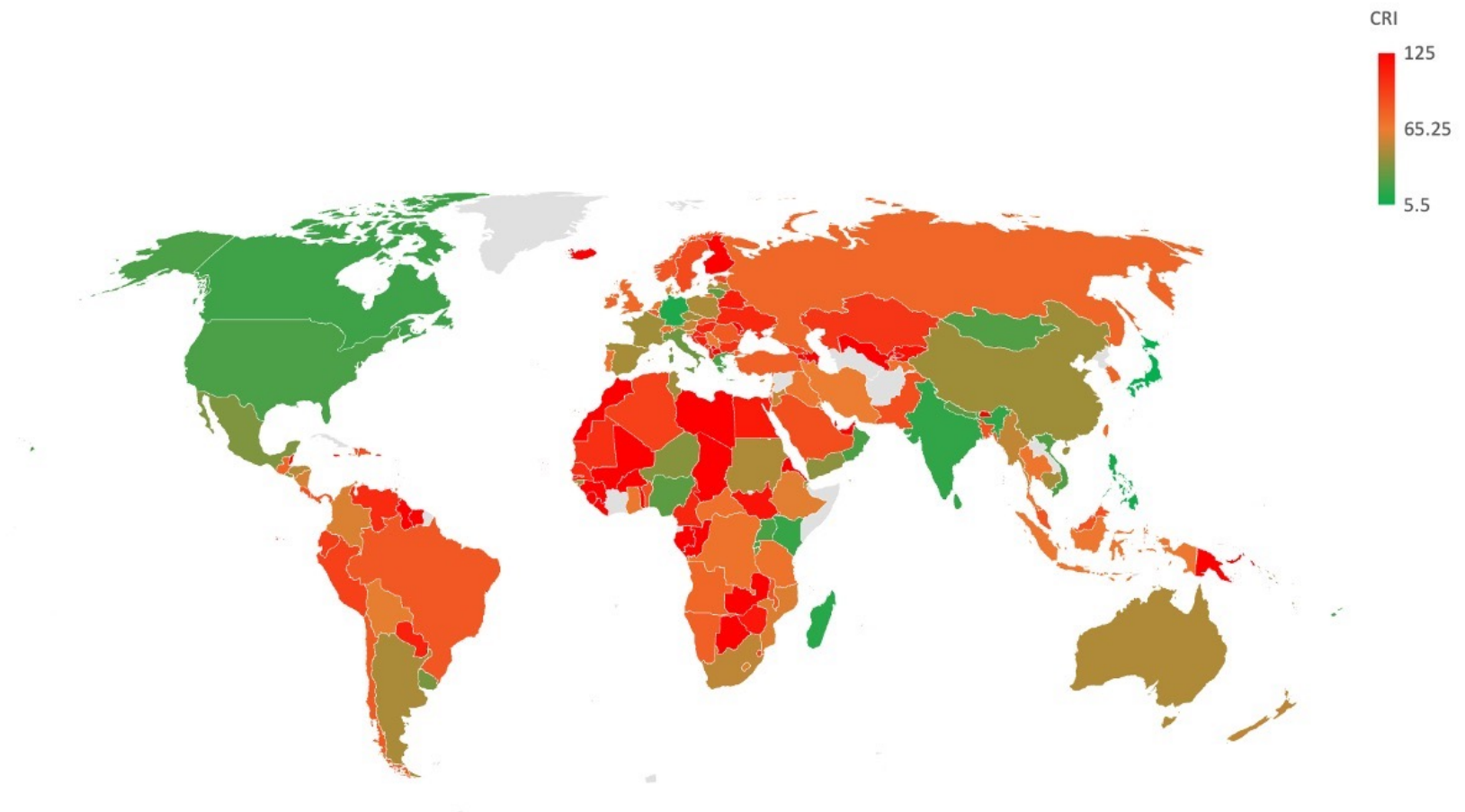
1. Commodity Dependence



2. Country Life Cycle

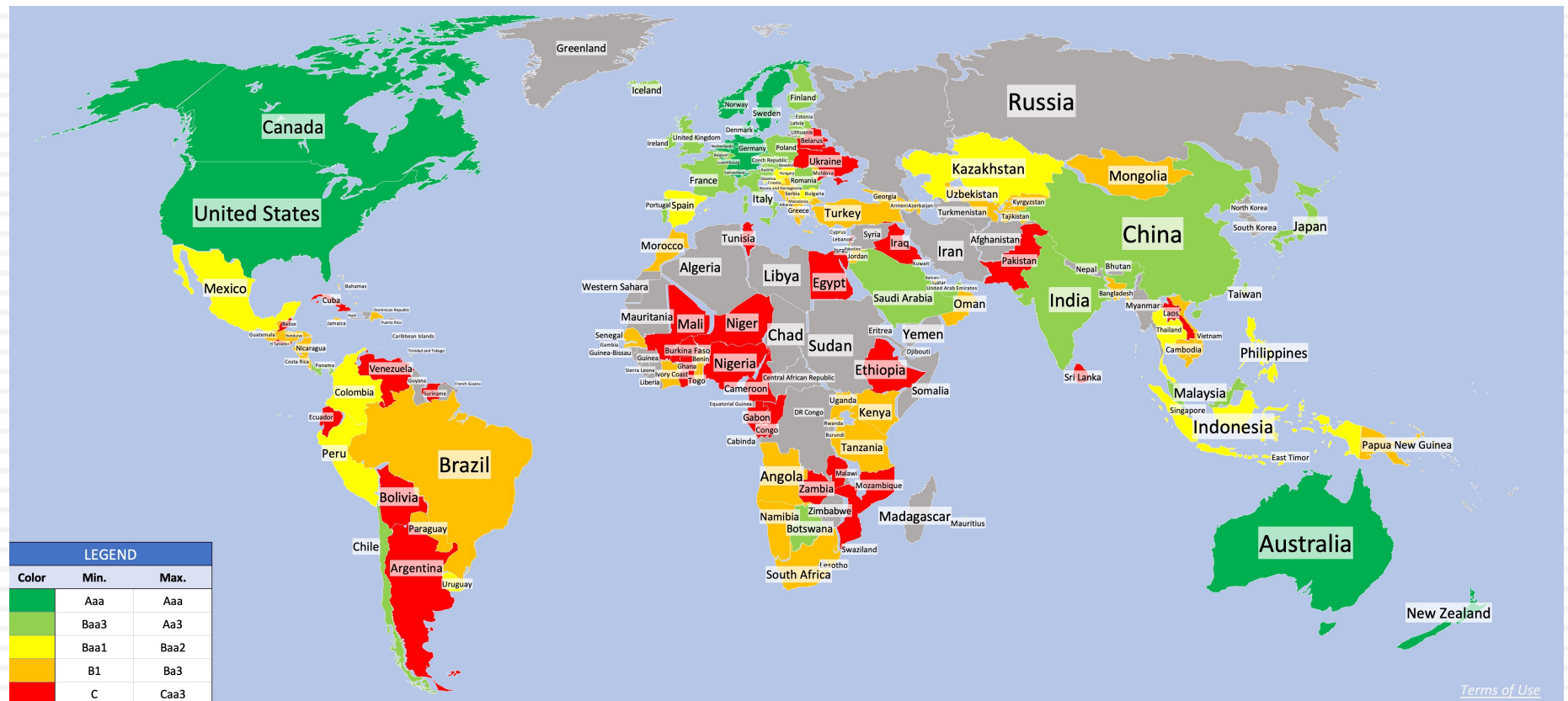


3. Climate Change



Measuring Country Risk –

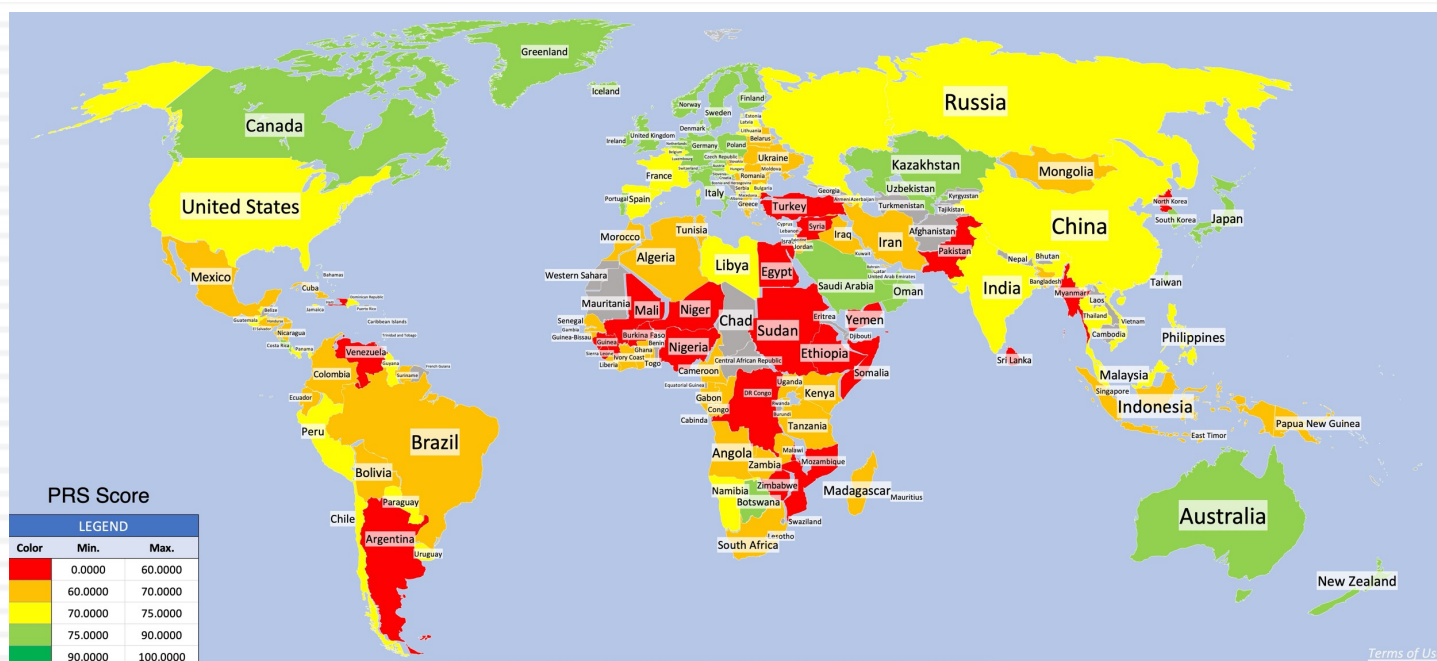
1. Default Risk = Sovereign Ratings



Response	Percentage
Yes, the current government is responsible	95%
No, the current government is not responsible	5%



2. Country Risk Scores

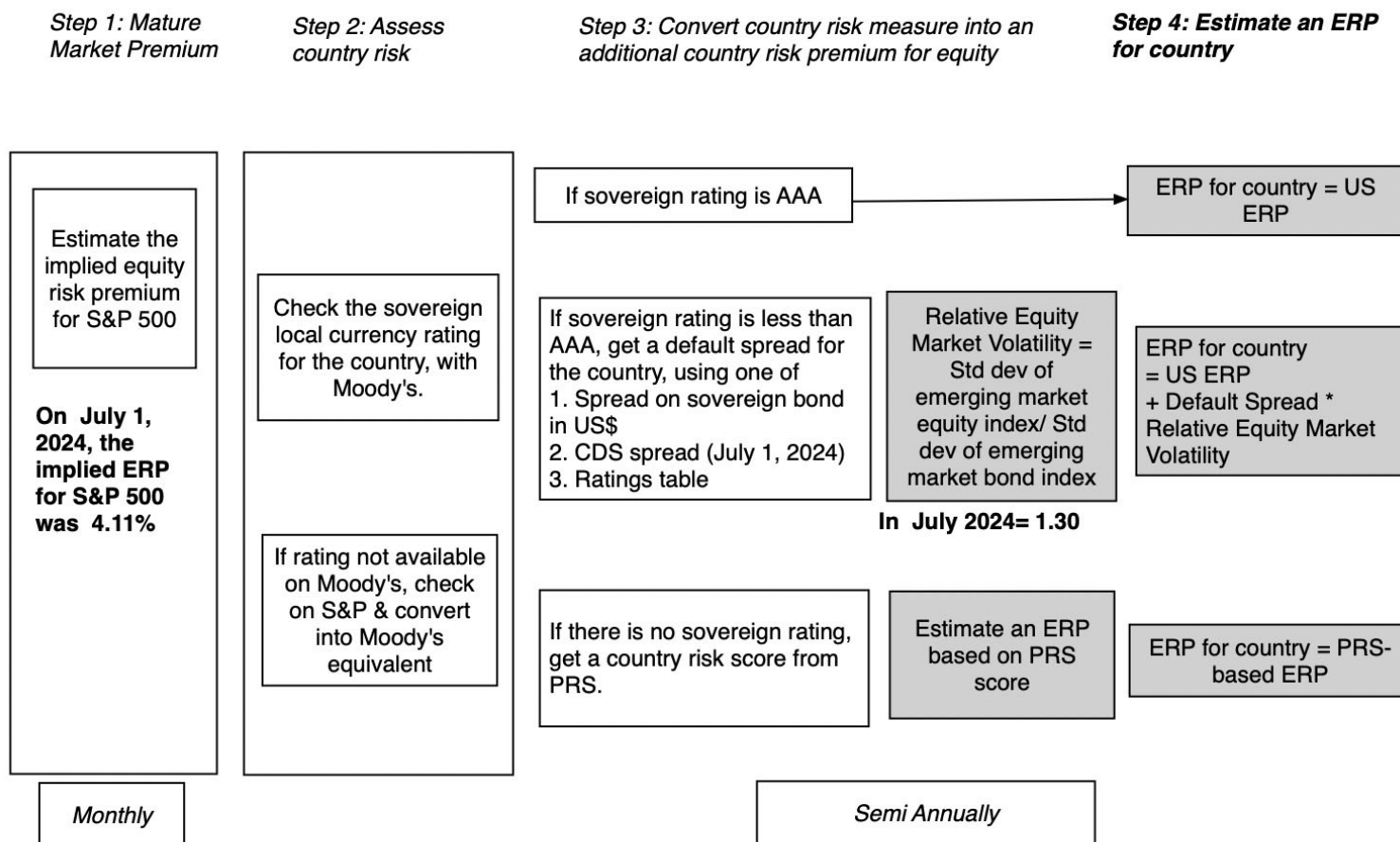


Lowest PRS scores
indicate higher country
risk

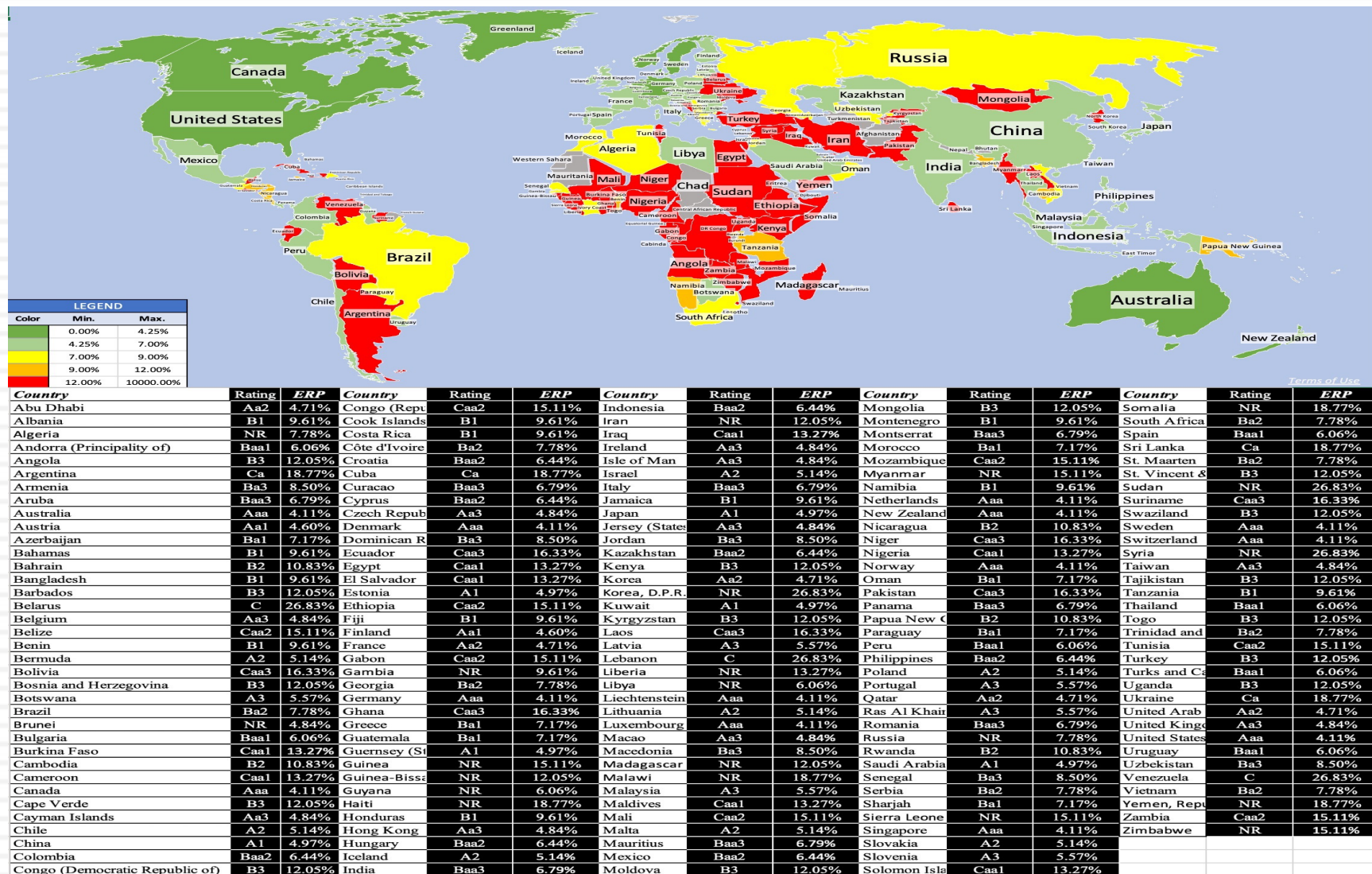
Riskiest countries		Safest countries	
Country	PRS	Country	PRS
Lebanon	34.3	Norway	87.0
Sudan	43.5	Singapore	86.5
Syria	44.3	Denmark	86.3
Niger	48.0	Taiwan	86.3
Korea, D.P.R.	49.3	Switzerland	86.0
Yemen, Republic	51.5	Luxembourg	84.3
Malawi	52.3	Ireland	83.0
Venezuela	53.0	Iceland	82.0
Nigeria	54.3	Brunei	81.8
Pakistan	54.3	Canada	81.8

3. Equity Risk Premiums - Approach

ERP Estimation Procedure - July 1, 2024



And results...



Country Risk in Business

The Drivers of Hurdle Rates

Currency Choice

Your choice of currency for analysis will determine the riskfree rate you use, with higher inflation currencies carrying higher riskfree rates

Riskfree Rate

Business Choice

Your relative risk is determined by the business you are investing in, with more discretionary products/services carrying more relative risk.

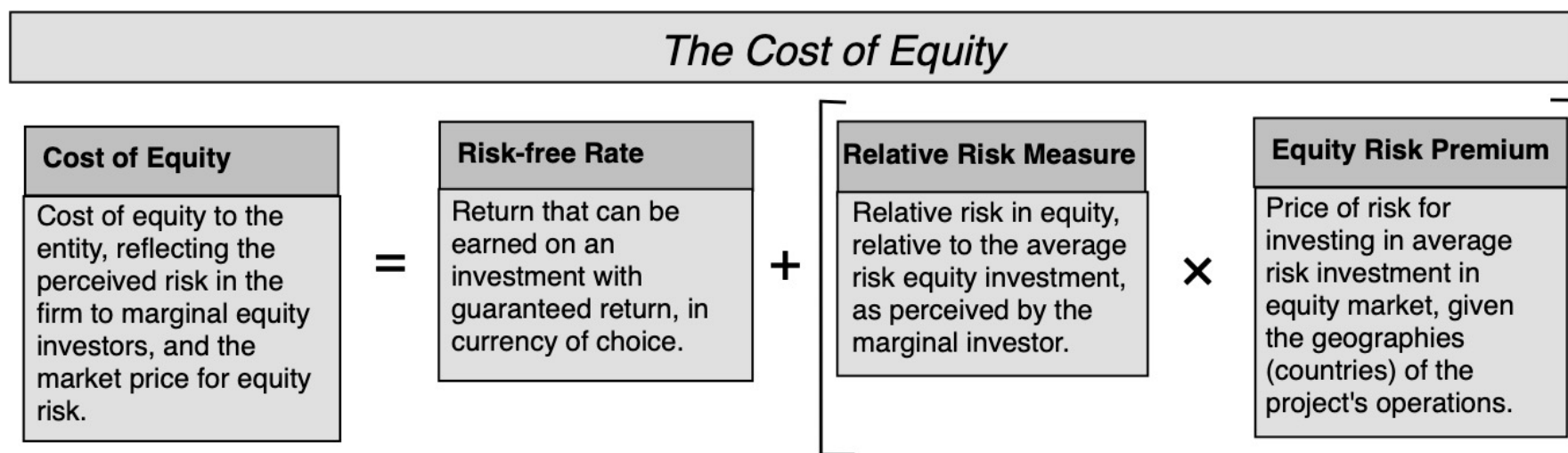
Relative Risk Measure

Geographical Exposure

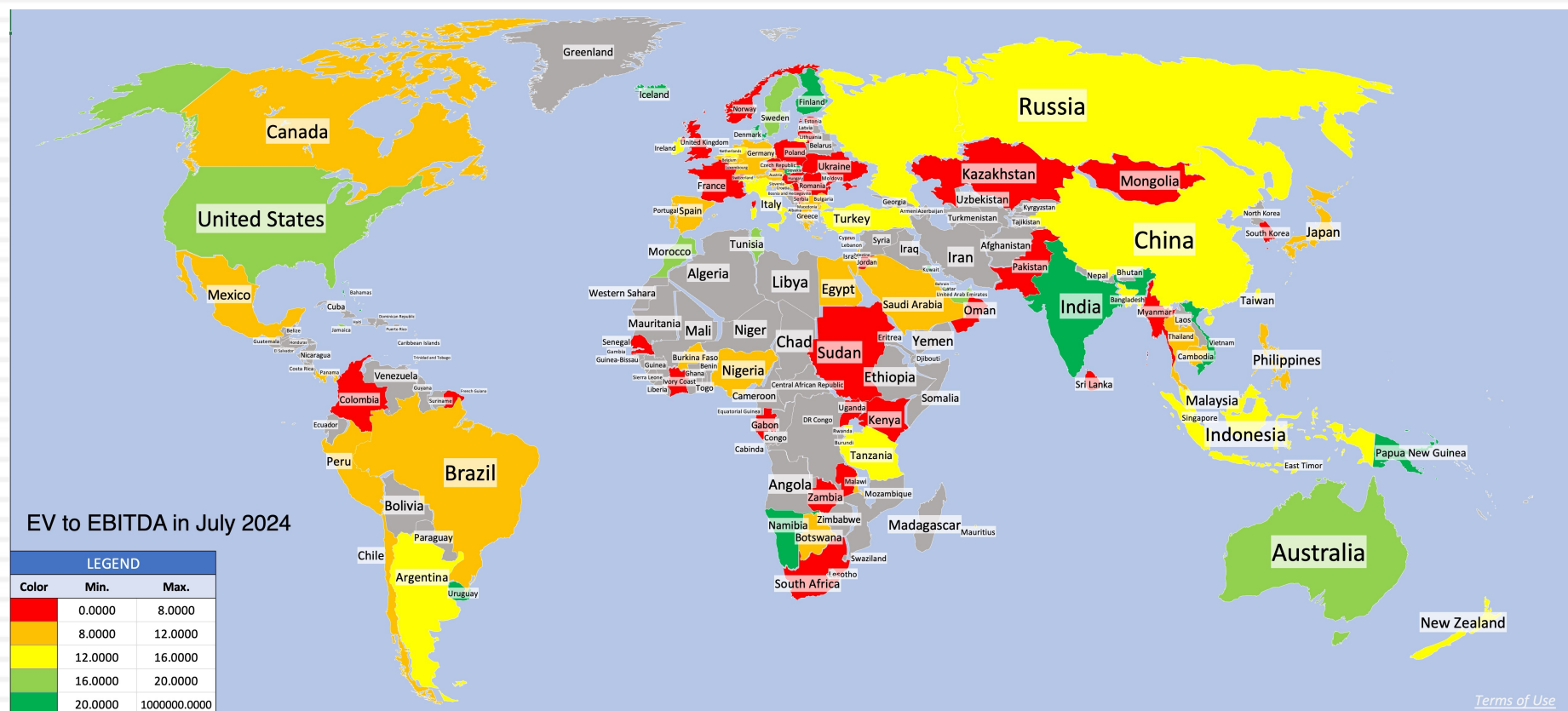
The price of risk in the market (or equity risk premium) is determined by the countries in which your operations lie (production and sales), with riskier countries carrying higher prices.

Price of Risk in Market

Country risk in valuation



Country risk in pricing

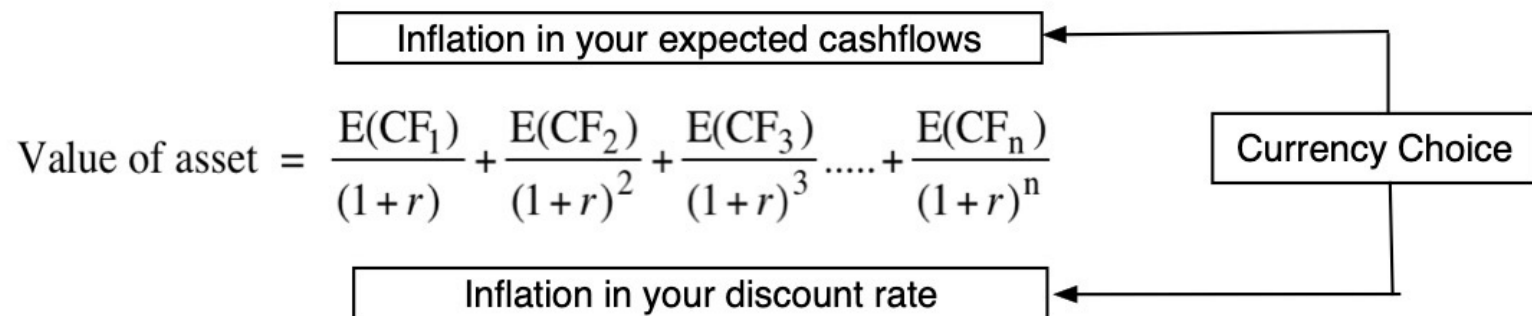


Where is the currency effect/risk?

- You may find it odd that I have spent so much of this post talking about country risk, without bringing up currencies, but that was not an oversight.
- It is true that riskier countries often have more volatile currencies that depreciate over time, but this more a symptom of country risk, than a cause.
- As I will argue, the currency choice affects your growth, cash flow and discount rate estimates, but ultimately should have no effect on intrinsic value.

Currency Consistency

- If expected inflation is lower in US dollars than in rupees, the cost of capital that you should obtain for a company in US dollars will be lower than the cost of capital in rupees, with the difference reflecting the expected inflation differential.
- However, since your cash flows will also then have to be in US dollars, the expected growth that you should use should reflect the lower inflation rate in dollars, and if you stay consistent in your inflation estimates, the effects should cancel out.



Riskfree rates and Inflation

- If my assertion about expected inflation is right, variations in riskfree rates can be attributed entirely to difference in expected inflation.
- At the start of July 2024, for instance, I estimated the riskfree rates in every currency, using the US treasury bond rate as my dollar riskfree rate, and the differential inflation between the currency in question and the US dollar:

$$\text{Riskfree rate in Currency} = (1 + \text{US Treasury Bond rate}) * \frac{(1 + \text{Expected Inflation Rate in Currency})}{(1 + \text{Expected Inflation Rate in US \$})} - 1$$

Exchange rates and inflation

- In the same vein, inflation also enters into expected exchange rate calculations:

$$\text{Expected Exchange Rate}_{C1, C2} = \text{Spot Exchange Rate}_{C1, C2} \frac{(1 + \text{Expected Inflation Rate}_{C1})}{(1 + \text{Expected Inflation Rate}_{C2})}$$

- Higher inflation currencies should see expected currency depreciation in future years. It is not the depreciation, per se, that is risk, but deviations from that depreciation.
- This is, of course, the purchasing power parity theorem, and while currencies can deviate from this in the short term, it remains the best way to ensure that your currency views do not hijack your valuation.