The Three C's of Country Risk in Valuation: Clarity, Consistency and Credibility

Valuers generally agree that the broader economic, political and legal environment in which a business operates can significantly affect future cash flows and the certainty of receiving them. These types of risks that businesses face often vary depending on the countries in which they operate, yet questions persist about how to account for these 'country risks' in valuations.

Country risk premiums ("CRP") are a commonly applied upwards adjustment to the discount rate used in discounted cash flow ("DCF") valuations. CRPs are applied by some valuers when valuing businesses that operate in emerging economies and other economies perceived as less stable or developed, with an upwards adjustment to the discount rate generally reducing the assessed value of a business.

However, despite their prevalence, the theoretical underpinnings of the CRP remain subject to debate. Valuers sometimes explain why they are including a CRP in their discount rate, but often provide little to no justification to clarify whether or how the application of a CRP fits into their valuation framework. Where justifications are provided, there is often inconsistency between valuers about what the CRP is adjusting for and about how the CRP should be estimated. This results in a general lack of acknowledgement of the additional uncertainty introduced by the use of a CRP to estimate the value of a business when compared against the uncertainty inherent to the valuation of similar entities in stable jurisdictions. When the difference is material to a valuation, this may reduce the reliability of DCFs and mean valuers place too great a weight on their use.

CRPs are widely used in DCF valuations but remain an imperfect approach. They are often applied to cover risks not fully captured in forecasts or discount rates, yet common methods of estimating them only partly address these issues and are often not aligned to the justifications provided for their inclusion. Notwithstanding, as the use of CRPs is so prevalent, they may have some heuristic reliability since they have been often crosschecked against other valuation evidence. Therefore, valuers may have developed a 'sense' for the appropriate level of adjustment.

It may therefore be reasonable, regardless of a precise theoretical justification, for a valuer to account for country risks by applying a CRP. However, absent strong theoretical backing for their approach, valuers should:

— Recognise that such an approach is inherently heuristic and increases uncertainty around the result of the DCF valuation.

— Be aware of evidence suggesting that popular reference points for estimating the CRP may, at best, be only partially related to the types of risk valuers usually attempt to reflect in the CRP.

— Consider the weight they should place on DCF valuations of companies which are subject to country risk relative to other indicators of value, such as prices observed from market transactions in comparable assets.

Country Risk in Valuation

Within the period September 2014 to March 2015, tribunals in two separate investment treaty arbitrations awarded compensation to claimants against Venezuela based on DCF valuations of expropriated assets. Both tribunals found that a CRP should be applied in these valuations to account for Venezuela's country risk, but applied very different CRPs — 4% in *Gold Reserve Inc v Venezuela* and 14.75% in *Tidewater v Venezuela*.[1] These tribunals were assisted by party-appointed valuation experts who, across both matters, applied an even wider range of CRPs (1.5% to 16.4%).[2] In *Gold Reserve Inc v Venezuela*, the Tribunal observed that its preference for a 4% CRP over the 1.5% CRP put forward by the claimant's expert reduced damages by $130 million — around 20% of the total damages awarded.[3]

Whilst all the valuers above reached the same conclusion that accounting for the country risk of operating in Venezuela through a country risk premium is appropriate, they did not all provide the same justification or rely on the same method of estimation, resulting in different CRP adjustments. That is, there can still be considerable variation regarding the preferred approach to account for country risk and even small differences can have large effects on the damages award.

How can valuers use CRPs to account for country risks when preparing DCF valuations? What is meant by 'country risk'? What methods do valuers use to incorporate country risks into their valuation frameworks? What are the justifications for doing so? Is there coherence between the justifications for applying a CRP and the methods typically used?

The DCF Framework

There are two main components in a DCF valuation: a forecast of expected cash flows and the discount rate applied to these cash flows.

Expected Cash Flow Forecast

The expected cash flow forecast should, in principle, be an average of future cash flows expected under all possible scenarios, weighted by the probability of each scenario arising. These scenarios may arise from circumstances that are specific to the business and/or those which affect the wider market.

For example, if investing in a new technology is expected to generate cash flows of either $100 million if the technology can be successfully commercialised, with 25% probability and $0 if it cannot, with 75% probability, the expected cash flow for this investment would be $25 million ($100 million x 25% + $0 x 75%).

Discount Rate

The discount rate should, in principle, be the rate of return that investors require to part with actual current resources in return for potential cash flows in the future. When future cash flows are discounted at this rate, their present value reflects the cost of forgoing the next best alternative investment and therefore reflects the cost of capital to the business.[4] Two factors affect the required rate of return: the 'time value of money' and 'risk' of the business.

The 'time value of money' reflects that a dollar today is worth more than a dollar in the future because the dollar today can be invested to earn a return in the interim and has reduced purchasing power over time due to expected inflation.

'Risk' in this context refers to undiversifiable or systematic risks that affect all assets in an investor's portfolio. Investors can limit their exposure to risks unique to a single asset by diversifying and investing in a range of assets whose returns do not all move together in the same direction. As a result, investors are expected to require returns only for the risks that cannot be removed through diversification.

There are several asset pricing models which formalise the relationship between required returns and relevant risks. In our experience, the most commonly used model is the Capital Asset Pricing Model ("CAPM"). A valuer adopting the CAPM assumes that:

— The investor already holds a diversified 'market portfolio' and

— The return required for investing in an asset depends on the undiversifiable/systematic risk introduced by adding that asset to the market portfolio, which risk is captured in the 'beta' parameter of the CAPM.[5]

Country Risk

Valuers often have to grapple with how country risk should be accounted for in a valuation, across both the expected cash flow forecast and the discount rate. For example, the 'time value of money' of businesses in environments with unpredictable high inflation will be markedly higher than in environments with predictable low inflation expectations[6] and a business's 'risk' profile will partly be determined by the geographies in which it operates.[7]

One common approach to account for country risk in the DCF framework is to adjust the discount rate used upwards by a CRP. Potential sources of country risk vary significantly and can impact a company's operations in numerous ways (see Table 1).

Table 1: Potential sources of country risk

Source	Description	Examples of potential effect on company
Physical	Susceptibility to and ability to withstand adverse natural occurrences, such as disasters or climate events.	Adverse natural occurrences in a country may disrupt a company's operations and/or affect the livelihood and spending power of its local customer base.
Governance	Political stability, government effectiveness, regulatory quality, political accountability and corruption.	Political instability and unrest may lead to violence and the destruction of a company's property. Lack of accountability enables corrupt acts against a company.
Legal	Effectiveness and predictability of the legal system, including recognition of international treaties.	Enforceability of property rights reduces expropriation risk which affects a company's ability to realise the returns of its investment.
Economic structure	Difference in macroeconomic environment and macroeconomic stability, including exposure to currency risk and inflation, dependence on key natural resources, access to capital and trade barriers.	Overdependence on one key resource means that the economic health of a country is subject to the availability and price of this resource.
Social	Social stability and cohesion, strength of labour unions and stability of neighbouring countries.	A lack of social cohesion (for example, resulting from inequality) may result in frequent industrial action by labour unions which disrupts business operations.

Valuers' Approach to the CRP

In a reliable application of the CRP, there should ideally be coherence between:

— The justifications a valuer offers for applying a CRP and

— The methods used to estimate the CRP.

Justifications for Applying a CRP

Proceeding from the framework discussed, there are two common, yet widely debated, justifications cited by valuers for incorporating a CRP into the discount rate:

— To remedy cash flow forecasts which do not properly reflect the effect of potential future adverse outcomes arising from country risk factors and which should constitute the probability-weighted average forecast (the "missing adverse outcomes" justification) and/or

— Because there are country risks which are undiversifiable/undiversified by the 'marginal investor' (the investor most likely to be trading on shares in the business and setting the share price) and which are not captured in the 'beta' parameter of the CAPM. Therefore, investors require additional returns over those estimated using the CAPM (the "additional required returns" justification).

Missing Adverse Outcomes

Valuers generally agree that expected cash flow forecasts used in a DCF should, where possible, reflect all potential scenarios, including adverse outcomes that may arise from country-related risk factors. For instance, Pratt and Grabowski explain that *"net cash flows to be discounted or capitalized should be statistical expected values, that is,*

(mean) probability-weighted cash flows"[8] and Professor Aswath Damodaran explains that expected cash flow forecasts should be *"computed by considering the possibility of poor outcomes"*.[9]

As a logical consequence, cash flow forecasts which do not reflect potential adverse outcomes are overstated and would, if used in a DCF valuation, result in an overstated valuation. This might, for instance, be because the forecast is prepared on a 'business as usual' basis which assumes no adverse outcomes or because the uncertainty regarding the likelihood and effect of the relevant outcome makes it hard to incorporate into the forecast.

Therefore, the valuer may correct the available cash flow forecast to reflect any missing adverse outcomes, and then apply an unadjusted discount rate to that corrected forecast.

However, after adjusting for some adverse outcomes, it may still be appropriate to adjust the discount rate for a CRP, as reliably quantifying and incorporating all adverse scenarios into expected cash flow forecasts can be challenging or infeasible. For instance, it may be extremely difficult to assess the probability of political unrest and/or estimate the associated cash flows if such unrest were to occur, even if this adverse scenario were plausible and foreseeable.

Additional Required Returns

Some valuation practitioners advocate incorporating a CRP into the discount rate as the returns from businesses operating in emerging markets are subject to more risk than those of businesses that operate in developed markets. An investor deciding between the two markets may not be indifferent to two expected cashflows of equal amounts due to one having a greater chance of disaster than the other.[10] Consequently, investors may require additional returns to invest in emerging economies (relative to developed economies) for their tolerance of risk. To be able to adjust the discount rate for these additional required returns, a valuer would have to consider the incremental risks that an investor is taking on by the investment; whether these incremental risks are diversifiable; and, if not diversifiable, to what extent these incremental risks are captured by the beta.

However, Brealey, Myers and Allen *"warn against adding fudge factors to discount rates for projects in developing economies"*, explaining that whilst developing economies are more volatile *"much of that risk is diversifiable for investors in the U.S., Europe, and other developed countries"*.[11]

Professor Damodaran, as a proponent of the additional required returns viewpoint, counters this and considers that after steps to diversify these risks or incorporate them into the cashflows, there remains material risk that is not fully diversifiable as:[12]

- At a broader level, capital markets are segmented and imperfect. Yet the CAPM assumes perfect markets, so some adjustment to the discount rate for a characteristic that is correlated with the effects of an imperfect market and that you can reasonably measure may be appropriate (for example, "size" or country risk).
- Country risks are not fully diversified away/diversifiable either because the marginal investor does not hold a globally diversified portfolio or due to *"the increase in correlation across markets [in different countries]"*.
- The beta parameter within the CAPM does not fully reflect the effect of undiversifiable risks on required returns.

Therefore, according to Professor Damodaran the valuer may account for the additional risk of investing in such jurisdictions, and the ensuing additional returns investors require, by applying an uplift adjustment to the discount rate.

However, the extent of this evidence is debated and is covered in further detail elsewhere,[15] with Kruschwitz, Loffler and Mandl disagreeing with Professor Damodaran's proposition that increased correlation between equity markets prevents diversification of risks. They explain that:[16]

"This is a very odd view of things. It is at least possible to show that even a positive correlation allows for the setup of portfolios that are less risky than if one were to invest solely in the lowest-risk asset. […] Also, Damodaran makes absolutely no reference to how strongly one has to diversify in order to eliminate the need for a country-specific risk premium. His views regarding this aspect, too, need to be considered arbitrary."

Common Methods Used to Estimate the CRP

In our experience, valuers often estimate the CRP by reference to measures of sovereign credit quality, namely sovereign debt spreads or credit default swaps ("CDS") spreads. In doing so, they assume that there is a direct relationship between the quality of a country's sovereign debt and country risk factors.

A sovereign debt spread compares sovereign debt risk by measuring the difference in yield (in percentage points) between a typically U.S. dollar-denominated bond issued by the government of the country in question and a riskless investment, typically U.S. dollar-denominated bonds issued by countries with almost no sovereign default risk, such as the United States. The higher the spread, the higher the risk of default.

An alternative measure of sovereign debt risk is the CDS spread, which measures the difference in percentage points between the price of insuring against defaults on sovereign bonds issued by the country in question and the price of insuring against defaults on a riskless (or very low risk) sovereign bond. The CDS spread reflects the incremental default risk of the country in question and the risk that the CDS seller is unable to pay the investor in the event of a default.

In our experience, valuers either adopt observed sovereign debt/CDS spreads as the CRP or make one or more of the following adjustments to these spreads:

— Multiplying the observed spreads by a multiplier in an attempt to reflect that equity markets are more volatile than bond markets and/or

— Multiplying the CRP by a factor to reflect their views on the subject company's exposure to country risk, relative to the average exposure of all companies/assets in the country.

Other estimation methods may rely on political risk consultancies for qualitative rankings or ratings agencies for quantitative rankings to perform an assessment of countries' relative risks.

Valuers in practice may not consider sovereign spreads or other estimation methods directly, but rely on indexes and CRP adjustments prepared by other practitioners. For example, Professor Damodaran's adjusted discount rate dataset based on sovereign spreads.[17] However, Professor Damodaran cites the additional required returns reason to justify the application of a CRP.[18] It therefore at least appears that his adjusted discount rates are intended to reflect additional returns which, in his view, are required when proceeding from a CAPM-derived cost of equity.

The Three C's of the Use of a CRP

Where valuers use a CRP in their valuations, they need to ensure their rationale for applying a CRP is: clear, consistent with their valuation framework and supported by credible estimation methods.

Clarifying Justifications for the Use of a CRP

A clear justification for applying a CRP requires articulating both the purpose and scope of the adjustment. We have seen practitioners argue that valuations should incorporate a CRP in the discount rate simply because this is what market participants do, without consideration for how it fits into their valuation framework.

While there is evidence that investors do incorporate CRPs into their assessments,[19] that alone is not a satisfactory reason for doing so. Instead, a valuer should carefully consider what evidence or conclusions can be drawn from the discount rate applied by market participants in their valuations. Further careful thought should be given to whether (and, if so, how) the application of a CRP fits into their valuation framework. Without clear justification for the use of a CRP, there is no principled basis for determining an appropriate estimation method.

Consistency Between the Justifications for and Methods of estimating a CRP

Valuers should establish a relationship between the justification for and method of estimating the country risk being addressed to ensure consistency within their approach. This is because the decision over how one adjusts for what is perceived to be absent is necessarily determined by what is perceived to be absent. If a valuer applies a CRP because of:

— Missing adverse outcomes, then it would be relevant to identify and understand (where possible) what the 'missing' adverse outcomes might be or

— Additional required returns, then it would be relevant to identify and understand (where possible) the undiversified risk factors which are not captured in the beta parameter of the CAPM.

In the context of valuations performed in arbitrations, identifying the justification for a CRP becomes more complex. The missing adverse outcome or reason for requiring additional required returns is often the subject of the dispute or a compounding factor, such as expropriation risk. This carries further nuances as the debate over whether and how hindsight should be used may shape what adverse outcomes or additional returns are identifiable.[20]

The valuer should then assess whether the chosen estimation method for a CRP – often based on sovereign default risk – results in an adjustment that is commensurate with the adverse outcomes or risk factors they have identified. We are aware of a small number of academic studies which explore the relationship between sovereign default risk and certain country risk factors.

— Bekaert, Harvey, Lundblad and Siegel find, based on an analysis of sovereign spread data from 1994 to 2009, *"on average, one third of the sovereign spread reflects political risk."* [21,22] They find that sovereign default spreads *"reflect much more than political risk"* and conclude that *"it is a mistake to use overall sovereign spreads to adjust discount rates for political risk in international investment"*.

— Ferreira, Xavier and Martins find, based on an analysis of Brazilian market data from 1996 to 2016, that there was no statistically significant relationship between default spreads and measures of political uncertainty.[23]

The research suggests that:

— The extent to which sovereign debt spreads relate to country risk factors will vary by country, as certain factors can be confounding upon one another. For example, a country's macroeconomic structure, such as whether it has a pegged exchange rate, or legal structure, such as deference to treaties, may amplify the effects of other political risks on sovereign debt spreads.

— Sovereign debt spreads of some countries may not be meaningfully related to certain country risk factors.

— Where sovereign debt spreads are meaningfully related to country risks, it is possible that only a portion of these spreads are attributable to country risks. For instance, based on the findings of Bekaert, Harvey, Lundblad and Siegel, applying a CRP derived from sovereign debt spreads to account solely for expropriation risk (a type of political risk) may substantially overstate the discount rate and therefore understate the value of the asset in question.

However, these studies do not offer guidance on how to tailor sovereign debt spreads or CDS spreads to account for different types of country risk, and we are unaware of any other study that does so. This gap in research reflects the general challenge in accurately determining the CRP based on measures of sovereign debt risk.[24]

Credibility of an Estimation Method

Credibility of an approach depends on both theoretical grounding and empirical backing. For example, applying arbitrary uplifts to the discount rate based on 'rules of thumb' can undermine confidence in a valuation.

Where a method for deriving and applying a CRP lacks theoretical and/or empirical support, valuers should recognise that such an approach is inherently heuristic and increases uncertainty around the result of the DCF valuation relative to one performed in a situation that does not warrant the use of a CRP. In the same vein, valuers should be mindful that popular reference points for estimating the CRP, while seemingly objective, may at best be only partially related to the risks the CRP is intended to capture.

In lieu of methods with strong theoretical grounding and/or empirically reliable reference points, a valuer may reasonably rely on proxies for the CRP as long as their flaws and limitations are considered and appropriately reflected in a valuer's analysis and overall conclusions. For instance, when valuing a company subject to country risk, a valuer may place more weight on indicators of value other than the DCF valuation. Such weighing of different valuation approaches is consistent with how valuers typically address other issues in practice.

Final Thoughts

Regardless of the justification that valuers may give for applying a CRP when preparing a DCF valuation, valuers must ensure clarity, consistency and credibility in the use of CRPs. Valuers are therefore faced with three common challenges:

— Articulating what risks they seek to reflect through the CRP.

— Ensuring that the reduction in value resulting from applying the CRP is commensurate with the relevant country risks.

— Considering critically their DCF valuations of companies subject to country risk as a part of their wider valuation framework.

For some countries, there is evidence that measures of sovereign debt risk are, in part, related to country risk factors such as political risk. In the absence of better approaches and in certain situations, it may be reasonable regardless of justification for a valuer to account for country risks by applying a CRP derived from sovereign debt risk, particularly if market participants apply a similar adjustment to valuations of the same or comparable asset.

However, if they do so, valuers should then:

— Recognise that such an approach is inherently heuristic and increases uncertainty around the result of the DCF valuation than when performed in a situation that does not warrant the use of a CRP.

— Be aware of evidence suggesting that popular reference points for estimating the CRP may, at best, be only partially related to the types of risk valuers usually attempt to reflect in the CRP.

— Consider the weight they should place on DCF valuations of companies which are subject to country risk.

The process outlined underscores the importance of checking DCF valuations against other indicators of value, such as prices observed from market transactions in comparable assets.

[1] Gold Reserve Inc. v. Bolivian Republic of Venezuela, ICSID Case No. Arb(AF)/09/1, Award, 22 September 2014, pages 216 to 220; and Tidewater Investment SRL and Tidewater Caribe CA v. Bolivian Republic of Venezuela, ICSID Case No. Arb/10/5, Award, pages 60 to 62, 13 March 2015.

[2] Ibid. These valuations performed will also reflect the parties' positions and Tribunals' views on issues relating to applicability of investment treaty protections on the values under dispute.

[3] $130 million / $713 million = 18.2%. Gold Reserve Inc. v. Bolivian Republic of Venezuela, ICSID Case No. Arb(AF)/09/1, Award, 22 September 2014, pages 217 to 218 and 220.

[4] att and Grabowski, Cost of Capital 3rd Edition, pages 3 and 6.

[5] In statistical terms, beta is a measure of the covariance of the asset and the market portfolio relative to the variance of the market portfolio. In simpler terms, beta reflects: (i) the extent to which the asset's returns move in the same direction as those of the market portfolio; and (ii) the size of these movements relative to the movements in the market portfolio.

[6] High inflation erodes the real value of money faster over time and shortens the length of business planning (Jutta Maute, Hyperinflation, Currency Board, and Bust: The case of Argentina, 2006, pages 63 and 73).

The presence of inflation targeting in a country is associated with lower country risk premia (Armand Fouejieu A. and Scott Roger, IMF, Inflation Targeting and Country Risk: An Empirical Investigation).

[7] Professor Damodaran, Country Risk: Determinants, Measures and Implications – The 2023 Edition, page 6.

[8] Shannon P. Pratt and Roger J. Grabowski. Cost of Capital: Applications and Examples, 3rd Edition, PDF page 17.

[9] Aswath Damodaran is a Professor of Finance at the Stern School of Business at New York University whose views on country risk are frequently cited and who maintains a common source of CRP data. Damodoran, A., Country Risk: Determinants, Measures and Implications – The 2023 Edition, 14 July 2023, page 60.

[10] For example, suppose there is an investment in two countries A/B and the investment in Country A resulted in $75 with certainty (100% probability) and the investment in Country B resulted in $100 with 75% probability but there is a 25% probability of nil, they would have the same expected cashflow ($75). However, a risk adverse investor would prefer the investment in Country A over Country B, and would require some uplift to the cashflows in Country B (or discount in price) to offset the risk they are taking on.

[11] They conclude that in the presence of country risks it is "important to think through the downside risks and to give them weight in cashflow forecasts". Brealey, Myers and Allen, Principles of Corporate Finance, 11th edition, page 232.

[12] Damodoran, A., Country Risk: Determinants, Measures and Implications – The 2023 Edition, 14 July 2023, pages 60 to 61.

[13] Segmented markets are where investors in each market can have differing risk premiums because each investor will not, or cannot, invest in the other market. Therefore, an investor in a segmented market will only be diversified across the investments within this market as opposed to an investor in a perfect market which can be diversified across markets.

[14] Damodaran, A., Country Risk: Determinants, Measures and Implications – The 2023 Edition, 14 July 2023, page 55.

[15] David Rogers, Andrew Wynn, and Lun Yaoguo, The country risk premium: A foreign affair, September 2018, https://web.archive.org/web/20200626104833/https://www.fticonsultingemea.com/~/media/Files/emeafiles/insights/reports/countryriskpremium.pdf

[16] Kruschwitz, L., Loffler, A., Mandl, G., Damodaran's Country Risk Premium: A Serious Critique, Business Valuation Review, 2012.

[17] Damodaran, A., Country Default Spreads and Risk Premiums, last updated 9 January 2025, https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html

[18] Damodaran, A., Country Risk: Determinants, Measures and Implications – The 2023 Edition, 14 July 2023, page 54 to 68.

[19] Fernandez, Pablo and Garcia de la Garza, Diego and Fernández Acín, Lucía, Survey: Market Risk Premium and RiskFree Rate used for 96 countries in 2024, 10 March 2024.

[20] Andrew Wynn and Noel Matthews, "The Use and Misuse of Hindsight," FTI Consulting https://www.fticonsulting.com/uk/insights/articles/usemisusehindsight

[21] Bekaert, G., Harvey, C. R., Lundblad, C.T., Siegel, S., Political Risk Spreads, National Bureau of Economic Research, 2014.

[22] Bekaert, Harvey, Lundblad and Siegel (2014) use, as their measure of political risk, political risk ratings from the International Country Risk Guide (ICRG) which consider: (i) the quality of legal / political institutions and their susceptibility to corruption; (ii) the likelihood of internal and external conflict; (iii) the extent to which the ruling government resembles a democracy; and (iv) the quality of government and likelihood of government actions (for example, expropriation). They (and the ICRG) distinguish between the aforementioned political risk factors and 'economic' or 'financial' factors (such as GDP, inflation, current account balance, foreign debt as percentage of GDP, exchange rate stability and foreign debt service levels).

[23] Ferreira, T.S.V., Xavier, G.C., and Martins, O.S., Political uncertainty and risk premium in the Brazilian stock market, Journal of Financial Innovation, 2018.

[24] The extent that the methods reflect drivers of country risk will vary by country, by company and by specific cash flow forecast. The extent to which a set of cash flow forecasts is (essentially) defective will depend on how that particular forecast has been put together.

ANDREW WYNN
Senior Managing Director
andrew.wynn@fticonsulting.com

LUN YAOGUO
Managing Director
yaoguo.lun@fticonsulting.com

DANIEL DAVIDSON
Director
daniel.j.davidson@fticonsulting.com