Country risk
Getting it right
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October 2018

Introduction

Over the past six months there has been a marked increase in country risk resulting from a combination of:

1. Global events

Growing levels of protectionism, nationalism and the resulting trade tariff wars which are threatening to disrupt international supply chains and impact global economic growth. This impact may fall disproportionately on emerging markets reliant on exports to developed markets.

2. Country specific events

Brexit, the election of populist governments (e.g. Italy) and emerging markets that have borrowed heavily in USD coming under significant pressure from rising USD interest rates and falling exchange rates (e.g. Argentina and Turkey).

Whilst it may be obvious to most that the risk of investing overseas has increased, what does this mean in practice for businesses and investors?

Why it matters

It is reasonable at this point to consider whether the country risk premium can really have a material impact on an investment decision or valuation. This is best illustrated with a simple example:

Let’s consider a typical Australian business in a sector with fairly average risk, a discount rate estimate (or WACC) of around 8% would not be unreasonable. If we were assessing a similar business which operated in a country with more risk, say Vietnam, and incorporated the appropriate country risk premium into the cost of equity and cost of debt, we would expect a discount rate of closer to 10%.

If the 8% discount rate is applied to value an investment opportunity in Vietnam (i.e. without considering the appropriate country risk premium) what could the valuation error be?

Making some simple assumptions suggests this could lead to an overvaluation of more than 30% – easily enough to be the difference between making an investment and walking away.
How to get it right

So clearly assessing and quantifying country risk is important to avoid bad investment decisions, the next question is how?

When calculating a discount rate for an overseas business the three most commonly used approaches to estimate the country risk premium component are:

1. **Government bond spreads**

   Calculating the yield spread of, say, a Vietnamese USD denominated government bond over the yield on an equivalent US government issued bond with the same term to determine the extra premium required for investing in the overseas market.

2. **Credit Default Swap (CDS) spreads**

   A similar approach to the above, but based on the difference in CDS spreads (insurance against default on government debt provided by banks and other financial institutions) between the overseas government and the US.

3. **Country credit ratings**

   Typically used where the individual country does not have sufficient USD denominated debt or a CDS spread to calculate a specific CRP. The CRP can be estimated using the credit rating assigned to the country by one of the major credit rating agencies and benchmarking against the CRP for other countries with the same credit rating.

Recognising the limitations inherent in each approach, we apply a combination of these approaches to conclude on the most reasonable estimate.

The assessed CRP is then typically added to both the cost of debt and the cost of equity in determining an appropriate discount rate.

**Our solution**

As part of our work in this area we have developed an interactive model that can assess and quantify the CRP for any country based on CDS spreads and credit rating data. This allows for regular monitoring of CRPs, which is particularly useful in the current environment where risks are changing much more quickly.
Where it can go wrong

Whilst it is important to note that there is significant judgement involved in estimating CRPs and, as in all valuations, there is no one ‘right’ answer, there are certainly approaches that can lead to problems. The most common example of this is where we observe practitioners simply relying upon a single approach or data source without considering the full context.

One source that is widely used by both companies and valuation practitioners is Damodaran. In many cases, this is the only source used, without full consideration of the limitations within this data.

In analysing the data presented by Damodaran we observe the following:

1. **The need to apply a combination of approaches**

Practitioners often use Damodaran’s ‘Rating-based Default Spread’ approach as CRPs are provided for considerably more countries under this approach. In practice this can result in premiums being over or under stated when cross checked with actual market data derived from other methods, including Damodaran’s own ‘Sovereign CDS’ approach.

Using Brazil and Croatia as an illustration (both assigned a Ba2 credit rating by Moody’s), shows that there can be a considerable variance when cross checked to CDS spreads.

<table>
<thead>
<tr>
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<th>Country risk premium (%)</th>
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<tbody>
<tr>
<td>Damodaran</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Government Bond Spreads</td>
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<tr>
<td></td>
<td>Credit Default Swap Spreads</td>
</tr>
<tr>
<td>Croatia</td>
<td>Government Bond Spreads</td>
</tr>
<tr>
<td></td>
<td>Credit Default Swap Spreads</td>
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</tbody>
</table>

The two approaches both provide similar results. Significant difference between approaches of 2.2% would require further investigation.

2. **Country risk can change quickly**

The Damodaran data is only periodically updated (every 6 months), whereas risk perceptions can shift much more quickly when a credit event occurs.

Current examples are Argentina and Turkey whose economic and political issues have led to a marked deterioration in their financial positions since 30 June, with their currencies falling around 25% and 30% respectively against the US Dollar over this period.

This has also led to a significant change in the CRP assessment for these two countries, with Argentina’s and Turkey’s CRPs both increasing by c.1.5% since 30 June 2018. Continuing to use a 30 June 2018 based CRP would lead to a significant overvaluation of investments in these markets.
3. Damodaran may overstate premiums for countries with weaker credit ratings

There is a substantial difference in the country risk premiums presented by Damodaran’s ‘Rating-based Default Spread’ (Government Bond Spreads) and ‘Sovereign CDS’ (CDS Spreads) approaches. We would expect the difference between these two approaches to be marginal, which aligns with our internal analysis. As an example, set out opposite are the country risk premiums for Vietnam under the various methodologies.

### Vietnam country risk premium (%)

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Damodaran</th>
<th>PwC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Bond Spreads</td>
<td>1.9%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Credit Default Swap Spreads</td>
<td>5.2%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Based on our analysis, the Damodaran Government Bond Spread approach appears to significantly overstate the country risk premium for countries with weaker credit ratings (see chart below).

### Country risk premium methodology comparison

Source: Damodaran website, PwC analysis at 30 June 2018.
Recent global events point to an economic environment of increasing risk, particularly for companies operating or investing in emerging markets. In this environment, appropriately quantifying country risk becomes ever more important to ensure investment opportunities are properly assessed.

Our analysis suggests that there are limitations to using Damodaran’s data which may lead to the use of outdated and/or significantly overstated country risk premiums. This may lead to companies setting discount rates and return benchmarks that are too high (or too low in some cases), seeing them miss out on joint venture/M&A opportunities and inappropriately assessing the carrying value of investments.

In many cases the country risk premium equates to 20%+ of the overall required return and assessing it incorrectly can have a marked impact on which investments proceed and those that do not.

**Our offering**

As part of our valuation offering we can perform a comprehensive assessment of the CRP for any country to ensure the country risk is appropriately reflected in the valuation outcome. Some of the outputs from our analysis are demonstrated below.

**Contributors**

To learn more about how PwC Australia could assist you in assessing overseas investment opportunities, valuing existing overseas investments or reviewing your country risk exposure, please reach out to your local PwC contact or us.

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