

COMMENTS ON WACC – METHODOLOGICAL PANEL

Step 1

(I) The project activity can only be implemented by the project participants and not by an entity other than project participant, or

(II) The project activity could also be implemented by entities other than the project participants.

A clearer definition should be drafted in the types of entities or projects that belong to each category, or perhaps a guideline on how to determine which PA belongs to case (I) and which to case (II).

Step 2

(a) The accounting books of the legal entity reflect at least the total value of all the assets needed for the project activity; or

(b) The accounting books of the legal entity do not reflect the total value of all the assets needed for the project activity.

If case (a) applies, w_e and w_d will be determined based on the accounting books of the legal entity. If case (b) applies, the default debt-equity ratio should be applied.

- If case (II) is applied therefore the parameters considered shall be standard in the market and not be linked to the risk profile of the particular project developer, then why should one determine w_e and w_d using the accounting books of the legal entity? This is contradictory to specifications in step 1. Besides, the level of indebtedness of the company might not reflect how the specific project is financed (e.g. a company might have several business units for which the debt leverage varies, etc.)

Where case (II) applies, the financial discount rate or financial benchmark shall be determined based on parameters that are standard in the market, considering the specific characteristics of the project type, but not linked to the subjective profitability expectation or risk profile of a particular project developer.

- What shall be done with companies that do not publish financial statements and therefore wish to maintain their debt to equity ratio information confidential?
- The fact that the PP might not have a debt to equity ratio that reflects the value of assets needed for the PA might be a signal that the PP needs a higher level of indebtedness and therefore the cost of financing (especially cost of debt) can be higher for this PP and not considering this fact might underestimate the value of the benchmark.
- Usually projects are developed by project purpose companies, or new companies created to develop the first project, hence there is no accounting balances yet available and even if so these balances might not be publicly available. When using default values, then the indebtedness level of the company might be overestimated or underestimated.

Step 3 – Option 3A

- Same remark as for Step 2, the indebtedness level of the company/legal entity might not reflect how the specific project is financed (e.g. a company might have several business units for which the debt leverage varies, etc.).
- The related financing risks are not included in the cost of debt, and even if this is said at the guidelines that should be included in the cash flow of the PP, in practice it is very difficult to determine and translate into a number.

Step 3 – Option 3B

- The commercial lending rate will not reflect the cost of debt for a long term project, a credit risk premium and country risk premium should be considered in this case (instead of including guarantees, which are usually confidential; financial institutions only make rates public).
- Which financial institutions could be considered? Usually in certain countries, certain types of projects have access to several types of loans; some of the institutions prevail over others and can become almost the only source or most common source of financing for these types of projects. These facts though are known by knowing the market and hearing from different PPs experiences, but most of the times there is no way of proving this. Moreover the rates and leverage of the debt might vary depending on the project risk profile and other variables, this adding the fact that the PPs keep this information confidential makes very difficult to gather the information in order to reflect how the market behaves.

Step 3 – Option 3C

- A credit risk rate should be considered in this case (idem option 3B).
- The condition that the country must have at least one bond issued is not sufficient to ensure that a market is mature and liquid enough for a government bond to reflect the cost of debt for a project activity. Usually the markets at developing countries don't issue long term bonds or these bonds are not transacted enough to reflect well the cost of debt at the country.
- Given the lack of information when considering the host country bond, the methodology shall consider adding a risk rate for the cost of debt.

Step 4 – Option 4A

- Perhaps 3 years is not enough as time frame for the government bond yield, since in developing countries these bonds might present deep variations over time.
- The 4.7% equity premium is for an US investor's point of view, mentioned at the paper in the draft tool, (**equity premium for a U.S. investor buying stocks in each of the 17 markets**). At the study 17 developed countries were considered and a world equity premium was calculated for each country, this number varies from 2.9% for Denmark to 9.9% for Italy, averaging 5.4%. The differences were attributed to the annualized real risk free rate between countries rather than to the exchange rate difference. Using only the US investor equity premium is too biased for the local cost of equity that is trying to be constructed for each host country; this premium does not consider local risks, a reference market (use of a beta), host country risk, regulatory risk and exchange risk (if the risk premium is for a foreigner investor then it is subjected to exchange risk). Our view is that a CAPM approach should be used, since there is no inclusion of business type risk and financial risk (systematic risk).
- The inclusion of the project risk is too difficult to determine and therefore establish in the cash flow, hence it would be better to include it in the WACC.

Step 4 – Option 4B

- The reference date for the bond's yield should be the start date of the project activity, since the financial analysis is performed for that date and besides to much time can pass until the PDD is written, especially considering the several versions to be drafted.
- Equations (3) and (4) would yield the same result, since RF (risk free rate) is GB-CDS; then there is no difference between both approaches.
- There is no apparent reason to use a lower equity risk premium. The 4.1% value is an equally weighted worldwide average for the equity premium before a standard deviation is added (to obtain the 4.7% used in option 4A).

Step 5 – Option 5A

- Why can't the financing percentage be project specific for case (I)? For example considering the percentage of the financing contract for the project activity, if there is one of course.

Step 5 – Option 5A

- This option does not necessarily reflect the situation for project activities. An average debt to equity ratio from the companies in the involved sector could be used.