2.6.2 Investment Appraisal

Self-Test Questions

Unit: Unit 1 – Treasury Strategy

Module: Module 2 – Risk and return

Date: 1 March 2012

Summary: Self test questions on investment appraisal.

Keywords: joint venture, listing, CAPM, risk free rate, equity risk premium, dividend

Question 1

How would you construct a cash flow valuation of a 33.3 % shareholding in a modestly geared 3-way joint venture which is very profitable but paying no dividends, and why?

Question 2

How would you adjust the cost of capital for evaluating a very attractive capital project in a high political risk, Asian country where your company has not previously operated? Your company operates mainly in the UK, Europe and the US. The project uses leading-edge technology and supplies consumer markets rather than the producer markets more familiar to you.

Question 3

You are the treasurer of Big Cheese Inc., a corporation listed on the NYSE. Big Cheese evaluates all projects using discounted cash flow techniques. Your M & A director is assessing the acquisition of a majority stake in Petit Fromage, a French company listed in Paris, and is seeking your advice on certain aspects of CAPM as he is unhappy with the approach taken by his French advisors. Although he is satisfied that the beta they are using properly reflects both the business & financial risks of the acquisition, he thinks they are valuing the acquisition solely from a French viewpoint without regard to Big Cheese's predominantly US based shareholders.

The French advisors have used a French risk free rate and a French equity risk premium when calculating WACC:

a) How appropriate is this for US based shareholders?
b) What other aspects should be considered if Big Cheese was only acquiring 40% of the equity?

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Answers

Answer 1

A difficult question – and one which should be tackled before entering into the arrangement, not after! Strictly, assuming significant influence but not control, one should only value the dividend streams. But there is no dividend stream yet - so are there any future dividend prospects?

What is the planned exit if there is no dividend stream; when, and how would it be valued for sale? For example we could value at 10 x EBITDA (or whatever the sector multiple) in year 5 then discount at our risk adjusted WACC. Our share would be 1/3 of this.

If no planned exit and no planned dividend payment - discount the free cash flows, with an extra factor for risk/uncertainty. Again, our share would be 1/3 of this.

Answer 2

It is a great temptation to load the discount rate for all of all these risk factors. But some of them are technically "specific risk" factors which potentially diversify your portfolio because of negative or low correlation/covariance with existing activities. Ideally one should try to get a feel for the non-diversifiable dimension of risk (for instance the beta of the sector, the country stock market/economy versus the domestic stock market) and build that into the cost of equity.

Answer 3

a) When looking at the cost of equity it is important to consider who the equity providers are. It is not unreasonable to assume that if a company is listed on the stock exchange of Country X, then the risk free rate, equity premium and inflation rate of Country X are applicable.

   Petit Fromage is listed in France so, from the point of view of its Paris Stock Exchange (even if not French) shareholders, Big Cheese's French Advisors cost of equity is probably reasonable. Big Cheese is in effect one of these investors and the project should make a return on this basis.

   However, as the M&A director says, there is no regard to US investors. You might advise that the project should also be assessed using US values for the risk free rate, equity risk premium and inflation as far as the cost of equity is concerned. After all, these represent the return Big Cheese's shareholders are looking for. With regard to the cost of debt, you should advise that this should reflect the actual mix of currencies. That said, in the case of Petit Fromage, the debt is probably in Euro.

b) You might also suggest that the M&A director consider the extent to which cash flows are actually repatriated to the US. The French evaluation probably assumes free access to all cashflows. This is probably reasonable, given that you are acquiring a majority stake? But will Big Cheese control dividend policy if it only holds a 40% stake. Perhaps the investment should also only be evaluated on dividends paid?

This exercise is designed to raise awareness of the many and murky ways that problems such as this are tackled in real life. It is probably safe to conclude that there is no ‘completely right way’ to do this and the best lesson a treasurer can learn is to work out what questions to ask, work out ways of looking at things from a different angle and to be able to challenge the answers with some answers of your own, perhaps even with a range of answers.