Writing a firm valuation as a final thesis.

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Doing a firm valuation is a common topic for a final thesis. This topic has a good deal to recommend to it. In particular it is a "low risk" topic, there is no question that one will be able to finish the thesis, one will be able to do valuation of some form or other as long as there is enough information. The typical minimum information necessary are the historical accounts of the company for a few years in the past.

The process of doing an actual valuation is a good way of bringing together the skills you should have been acquiring in a business education. It brings together elements from finance, strategy, economics and accounting.

A valuation thesis is also a very structured process, a checklist can be provided (an example below) of what is necessary to do to finish. This structured part is however a potential drawback to a valuation thesis, namely that it is hard to *excel* by performing a basic valuation, unless one can put a twist in the analysis that puts it above the basic valuation exemplified by the "cookbook" below.

1 Thesis structure

A typical valuation thesis contains the following elements:

1. Presentation of the firm/industry
2. Strategic/Economic analysis, as a basis for cashflow projections.
3. Methods for valuation
   (a) Cash flow projections, present value.
   (b) Ratios analysis.
   (c) Possibly a real options component, but only for some industries/cases.
4. Carrying out the present value calculation
   (a) Cash flow budget for five-seven years.
      i. Can be based on historical accounts
      ii. but can also be argued for directly
   (b) Estimating risk adjusted rate of return.
   (c) Terminal value estimation.
   (d) Present value calculation.

   Result in an estimate of the value
5. Do a ratio analysis to complement the present value calculation
6. Sensitivity analysis: Which are the key value drivers?
7. Are there option elements? Only relevant if firm contains *contingent* cashflows.
8. Conclude: Your valuation, how certain you are about the value, some perspective on the valuation. (Comparable firms/industries/countries...)

2 Choice of company

Choosing a suitable company is an important part of the process.

Some comments:

- It need to be a company where you can find the necessary information, such as annual reports.
- Large and complex companies can be hard to analyze, they can be hard to understand, and hard to perform any kind of bottom up approach to estimate cash flows.
- Smaller corporations are often easier to figure out, and open possibilities for modelling the processes driving cashflows in more complicated ways than simple fixed growth forecasts based on historical accounts.
- If you can get access to more complete information than that given by published annual reports, for example with direct interaction with the corporation, that is always a good thing.
- Listed corporations provide more information to the stock market.
- For listed corporations there is a stock price you can use to test your valuation.

3 Pitfalls

Let me mention some pitfalls in doing a valuation

1. The strategic analysis is not connected to the rest of the valution/thesis.

   This is the most common mistake in valuations. The *only* purpose of the strategic analysis should be to provide input to the cash flow estimation part. For example, if the strategic analyis identifies increased competition going down the road, this should be reflected in lower estimated cash flows.

   Going through the common strategic frameworks (Porter etc.) is all well and good, and a common part of a valuation, among others it can be used to understand the industry the firm is operating in, but it is of limited value if it is not *used* to inform the later analysis. So if you find you have gone through the strategy textbook, checked all the various models, and on rereading find that you don't use it, either make sure you connect it to the cashflows, or just cut it down.

2. Relying too much on past accounts.

   It is the common method for forecasting cashflows to start from the historical accounts, and then add a growth figure to project. But don't just unthinkingly use the last accounts without justifying it. (Was last year special? Should you take averages?...)

3. Writing too much about methods.

   A valuation is a standard exercise, described in any number of textbooks. While you need to tell the reader what you are doing, there is no need to rewrite the textbook.

4. Ignoring prior valuations.

   Doing a valuation is a common strategy for master/bachelor theses. You are likely to find other valuations of the same company you are writing about. If you have access to other valuations, *do not ignore that in your references.* Put them among the references, and in the text list them, and say that these are prior published valuations of the same company. It is fine to comment that others have done the same thing, just make sure you say what you add to the prior "research." Typically, all that you need to state is that you do the valuation at another point of time (Remember, valuations continually change). You may also want to comment on differences when discussing your value estimate.