# Common problems

## Multiple and different estimates from various financial sources

A common observation is that the beta obtained from Yahoo will be different than the one from Google, Reuters, ValueLine or Bloomberg (all of which are different from each other). The same can happen with any other estimates you might look up (PE, PB, forecast EPS, growth, etc).

The solution (we’ll use beta in this explanation, but others will be similar) is to recognize there are many different ways to calculate this. Do it yourself, with different benchmarks, different time periods, and different granularity (daily vs. weekly vs. monthly). Then, try to determine what the method used was used for each of your external estimates. Finally, make a judgement call on which is the best to use.

## Currency

Most of you have firms in countries other than New Zealand. For all countries, in the Financial Statements, DDM and DCF sections, use the currency as used by the firm (and reported on Yahoo, Google, Bloomberg, etc). You do **not** have to convert to USD or NZD. However, your final recommendation must show the target price in both the domestic currency and in New Zealand dollars (NZD).

## Negative estimated prices

A common cause of this is interpreting the negative "Dividends paid" in the Cash Flow statement as negative dividends in your DDM model. The number in the Cash Flow statement is negative because it was paid out. The dividends received by the shareholders (and therefore what goes in the DDM model) are positive.

Another problem is when income or free cash flow is negative. One possible solution is go back to a previous year when it was positive, and work from there. For the purposes of this report, taking the average of the past few years is acceptable.

A better solution is to use analysts' forecasts. Also, even when net income is negative, firms will often still pay dividends, so you can use the DDM model.

## Growth rate:

There are three 'sets': During first 3 forecast years (Interim Growth), the next 2 (Transition), and then afterward (Terminal).

For the 1st set, we've already discussed using the sustainable g, either from the text or the PRAT model. If ROE is negative, try going back a year or two, and/or take an avg of previous years to get a positive ROE.

Other methods: industry average, and analyst's forecasts.

Regardless of method, **interim** growth can be negative; that’s not common, but it does happen. It can also be much larger than k (cost of equity). That is relatively common, though use common sense if it is extremely big.

For any of these, use the one that makes the most sense (or an average of some), and then apply it to the Interim years.

During the transition period, the growth rate should change to the terminal rate in a simple linear fashion.

For 2023 and beyond, use the terminal rate. For that terminal growth rate, I recommend a rate between 2-3%, but as high as 5% is common. This is an assumption you make (it is not calculated), based on how aggressive you want to be on the valuation of your stock. All you need to do (for that assumption) is give some justification for what you chose.

## Relative valuation, PE, PB, Price/EBITDA, etc.

again, you might have negative values if you use most recent year, but you should be using forecast in any case. Again, industry average is good, as is analyst's forecasts.

## Fiscal year, and years data is available

Financial information will be reported in terms of a firm’s fiscal year, which tends to be different from calendar years. In the annual “financials” page for your firm (whether Income Statement, Cash Flow or Balance Sheet), at the top it will say something like “12 months ending June 30, 2019” that tells you both the Fiscal year, and when it ends. So for that firm, as of September 2019, you have the complete data for fiscal year 2019. Therefore your first forecast year will be 2020. For a firm with “12 months ending December 31, 2018”, your first forecast year will be 2019, even though as of September you already have some actuals data for the year.

Depending on your data source and your firm, you may not have as much data as you would like. Typically, financials on finance.google go back 4 years and on finance.yahoo 3 years (and on Bloomberg much longer), but for your firm you may only have a couple of years. Don’t worry about that; you can’t manufacture data that don’t exist. Just use what you have and tell us what happened.

## Common theme: “real data are dirty” (“real data are not your friend”)

You will almost always have to make some choices, to decide which is the best method to use. Often, one method will give a really strange number, and another will be more reasonable. That is why I ask for at least 3 methods.

When something seems really dodgy, that's where you say "this number can't be right", and then give your 'final answer' based on the more realistic method(s). Even if all the methods are way off, just give us what you have, and your final forecast price.

Rule: tell us what you did and why. As long as what you did was reasonable, and then you correctly applied that, we will not mark you down.

# Other instructions and etiquette

## References:

You only need to actually reference (as in Chicago style or APA style) bits where you have quoted material. Otherwise, simply stating the source is sufficient. That can be in the Word file (as a footnote or at each table) or in the Spreadsheet.

Having said that, don’t quote entire paragraphs. While that does get you out of plagiarism trouble, it is not your own work.

## Emailing questions:

Do not ask us to calculate anything for you.

We have tried to cover all the common questions we are getting, but we've probably missed a few, so if you have a question not covered above, we'll do our best to answer.

But, read through the above before doing so; **we will not respond to emails for questions addressed above.**

**Do not send attachments in emails** – those emails will be deleted without reading, so that our inbox doesn’t overflow and stop working.