How to make financial projections?

It is impossible for anybody to make projections with 100% accuracy (if reported results are exactly in line with your projections, it will be more likely a case of extreme luck or contacts (a euphemism for insider knowledge)). Often people ask us, if such be the case, then why make projections at all?

Projections serve a very important purpose. They give you a framework to analyze the company's operations in detail and thus understand reasons for deviations from the forecast. Projections, if made with care, at least give a good indication of trend. In other words, projections can at least let you know the broad direction of future financial performance, whether growth will be in the vicinity of 25-30% or 0-10% or -25%. This is of great relevance to the intelligent investor.

The other question, is whether one can make projections sitting in air-conditioned comforts without meeting management. Meetings with management serve the purpose of clarifying issues and understanding future strategy, but going to a meeting without understanding the business and drawing a core model is akin to facing Ambrose without cricket gear. Building the core model (in analyst lingo - "earnings model") is critical. To build this you need a good understanding of the company, what it does and in which area.

Financial analysts typically follow the following methodology for making projections.

Sales forecasting is the first step.

In case of a multi product company forecasting for each product should be done separately.

Key variables

a) Volumes for each product and category

b) Unit realization for each product separately

For volume growth (or decline as the case may be) estimates, one should look at past trends, industry outlook, company's competitive position and estimated market share.

Unit realization forecast would depend on price trends, discounts offered by the trade, prices of competing products, etc. Pricing power of various players and their likely pricing strategies also have a significant influence on the forecast. If one is starting with MRP of the product, care should be taken that prices do not include sales tax, and are typically net of distribution expenses. In case of an FMCG product (Fast Moving Consumer Goods) unit realization of the company, which will appear as gross sales will be typically 65% of MRP price which the consumer pays.

Many a times, companies give their volume figures under generic product category name. The volume figures include products of different sizes, types and prices. The analyst has to take care of expected changes in product mix while forecasting.

Keep a broad picture of the competitive scenario and its impact on pricing. Also, understand key drivers of pricing, like for petrochemicals, India is a price taker, so global price trends have a bigger influence in determining Indian price trends.

Material costs

Estimate material costs, which in most cases is the most significant cost item.

Key variables

a) Raw material prices

b) Production efficiency, conversion norms and yield improvement have a significant bearing on cost estimation.

The analyst has to understand the basic manufacturing process and get a fix on input output norms.

Labor costs

For estimating labor costs, one can start with previous year's labor cost and adjust it for the following factors.

Key variables

a) Additions/ adjustments for additional capacity/ new plant,

b) Reduction for retrenchment/ sale of a unit etc,

c) Salary increases on settlements with union etc. Many companies plan for settlement hikes and make provisions even if negotiations are delayed,

d) Bonus, profit linked incentives,
e) Salary increases.

Fuel and power cost

Power and fuel cost is a key item in some industries. If for the company under analysis, it is not significant (say less than 2% of sales), an analyst can make a judgmental estimate. Else look at key variables

a. Units of power to make one unit of output,
b. volume of output estimated,
   c) Technical efficiency,
c. Tariff rates of utility companies and fuel prices in different regions where units are located,
d. Availability of power. Given India is a power deficit country, availability of power might restrict production. This also might imply that the company has to invest in back up in form of generators.

Freight expenses

In cases, particularly when a commodity is moved over long distances, freight is a significant cost component. A good example of this is the cement industry, where it is expensive to transport cement, a bulky product over long distances.

Key variables

a) average freight rates,
b) volumes and distances.

Track the dynamics of the industry carefully, as changing demand patterns, new investments, etc tend to have a major bearing on your estimates. For example, if another company sets up a new cement plant nearby, the older company A may have to ship cement over longer distances. Thus, transport costs will increase, reducing margins. Moreover, realization will vary depending on the prices in the faraway markets.

Interest cost

Interest cost calculations require

a) average long-term debt during the year,
b) average working capital borrowings,
c) average cost of long-term and
d) average cost of working capital debt.

It is difficult to calculate interest costs from the long-term debt and working capital figures in a balance sheet. This is due to the fact that balance sheet is prepared at on the last day of the financial year whereas interest costs which feature in profit and loss account would be for the entire year. It could be co-related with the average debt or average working capital loan figures, which are not available in the balance sheet. For instance, if a company has a debt of one million rupees throughout the year and presuming that it repaid it a day before the end of the year (or substituted by some short term liability which is shown as part of working capital, it can show zero debt in the balance sheet.

Working capital figures may fluctuate due to seasonal nature of business. Working capital is high in peak season. If the year end falls in peak season, the reported working capital figure can be much higher and vice versa.

Interest is capitalized during construction period, therefore interest cost jumps up significantly after any project (funded by debt) is commissioned.

The analyst has to keep in mind, sales tax deferral loan which appears as a loan as these loans carry no interest. Also there can be subsidies or concessional loans under certain incentive schemes of the government or government institutions.

In effect, interest is a difficult line item to estimate, unless you have access to all capital expenditure estimates, detailed interest and repayment schedules of loans and working capital requirements. So, try to get understand the cash flows of the company for the future, estimate cash surplus deficit and only then try to estimate interest expenses. Also, use both cash/ bank balances available and quality of liquid investments while drawing your cash flow statements.

Depreciation

Depreciation in a company's account is normally charged as per the Companies Act, Schedule XIV. Companies are free to charge lower or higher rate but there has to be a note to that effect in the annual report.

Key variables

1. Have a fix on routine capital expenditure,
2. Expansion and the likely date of their commissioning,
3. Depreciation rates followed by the company for various types of assets.

Depreciation is charged pro rata. For instance, if the plant is commissioned in March, depreciation will be charged only for one month if the financial year ends in March. For calculation of income-tax, you can deduct depreciation for six months.

Depreciation rates are different depending on the type of assets and vary in case of continuous processes industry, depending on the plant-run for one shift, two shifts or three shifts.

Tax liability

Taxable profit is calculated after a few adjustments in the accounts. The key variables are

- Corporate tax rate,
- Depreciation rates and asset build up,
- Exports, if any
- Backward area benefits, if any

Depreciation rates according to the Income Tax Act is different. Also, there can be disallowance of some expenses.

In order to calculate taxable profit, the company has to add back book depreciation and deduct depreciation as per Income Tax Act. Rates of income tax are different and the depreciation in Income Tax Act is calculated only on WDV (Written Down Value) method. If the plant is commissioned on 30th September, Income Tax Act allows depreciation for one full year and in case the plant is commissioned in the second half of the financial year, then depreciation is allowed for six months only.

One should also note that income tax is calculated on financial year basis only, regardless of the 12 month period the company is following for closing its books. Thus, even in case of companies, which have December year ending, they have to prepare separate accounts to calculate their tax liability for the full year. Also, tax is payable in four installments as per income tax act by way of advance tax. The effective tax rate, which is tax paid divided by profit before tax is indicative of the tax field/ tax allowances available to the company and has no relation whatsoever to the actual tax rate.

Dividend

Generally, dividend is paid out of current year profits. In some exceptional cases, it can be paid out of profit from earlier years. This happens if the company has adequate reserves and is confident of a recovery even after making losses or lower profits in one year.

Preference dividend is paid only if there are adequate profits to pay out. It has priority over equity dividend. Equity dividend cannot be paid if the company does not have funds or profits enough to pay preference dividend.

Equity capital

While making forecasts, you have to take into account possible equity dilution (in form of rights and public issues). What about bonus issues? Bonus is issued out of free reserves, so networth will remain the same. Also, they cannot be predicted with any degree of certainty.

One needs to be consistent in terms of funding assumptions. For instance, a company is mooting to set up a project for which it would require equity investment. If you are assuming that the project will be set up, you will have to forecast equity dilution (ie an increase in equity). Factor in additional inflow of debt funds also. The sum total of increase in equity and debt coupled with funds generated from its ongoing business should be greater than the project cost. Whenever the project gets commercialized, increase its sales turnover and factor in its impact on all other aspects.

Borrowings

Once you prepare the cash flow statement based on the presumptions about profits from operations and working capital, find out funding requirement ie repayments falling due and capex, which are the two big line items.

So, the sources of funds are from operations (PAT less dividends) and depreciation and other non cash expenses, issuance of debt and equity. The uses are capex, repayment of loans and working capital. This will enable you to get a broad picture of the cash flow position. Use change in loans as the balancing figure, ie if there is a surplus, reduce loans and if there is a deficit increase it.

In many cases when loans are taken from financial institutions, even if you have surplus cash, it may not be easy to pre pay the same. In such cases the management might decide to pass surplus funds into investments or other short term current assets. In most cases you will find when companies raise money by way of public issue or GDRs, funds remain parked in loans and advances and investments till they are deployed in the project fixed assets creation.

Investments

This line item is difficult to estimate as most of times the detailed investment plans are not known to outsiders. One can estimate a part of investments based on cash positions of the company. Or keeping a track of its equity portfolio and checking out dilution in them. For instance, there is big chunk of MRPL shares in Grasim's books, so if MRPL is in need of funds, then you have to factor that in as investments in Grasim's books.

Fixed assets

Gross block would increase by the amount of new assets added in the year, net of historical actual purchase price of assets sold or discarded during the year. However, if there is a substantial sale of assets during the year, accumulated depreciation figure should be adjusted. When you look at any balance sheet, you may find that accumulated depreciation figure does not add up to previous balance and current provision. This is due to the fact that every year there may be some assets, which are either sold or discarded and accumulated depreciation amount gets adjusted by that amount. Net Block or net asset is gross block less accumulated depreciation.

Investment portfolio is of two types. One which is driven by business needs and the other a parking slot for surplus funds. The investment driven by business needs would include equity investment in subsidiaries, customers, key vendors, joint ventures or deposits with statutory authorities. Whereas the discretionary investment portfolio can comprise debt, fixed income securities or equities purchased through secondary market.

Many a time, companies invest in other listed companies belonging to the same group. This investment is discretionary and in most cases detrimental to shareholders interests. This is one reason why companies with a track record of active participation in the stock markets get a low discounting.

Working capital

As you know, working capital (or net current assets) is equal to current assets less current liabilities. To forecast this, one must estimate each of the constituents separately. All the items of working capital (except cash, current provisions to some extent) are dependent on sales. So, one need to get a handle on sales and work out each of these components separately (based on norms and past behavior).

a) sales
b) norms for each component
c) policy
d) short term assets/ liabilities

Each component of working capital should be estimated separately. Inventory forecast would depend on sales turnover, the company’s policies on raw materials, stockings etc. Nowadays, information technology also helps significantly in keeping inventory levels low. If there is a proper flow of information regarding inventories at various levels, particularly for multi-location company, planning at unit levels can improve significantly. This is the basis of Just in Time concepts on inventory management, ie keep inventory as low as possible to cut costs.

Receivables

This will depend on credit policy of the company. Compare this with past trends. If one expects, competition to pick up, expect better terms in future, ie longer receivables turnover.

Creditors

Creditors would depend on credit enjoyed mainly from raw materials suppliers. Working capital can also include non-trade current assets and liabilities, which gets camouflaged in loans and advances. In general, it is difficult to estimate loans and advances as they are discretionary in nature.

Miscellaneous expenditure

Miscellaneous expenses not written off refers to preliminary and pre operative expenses, which are written off over a period of time (say 5-10 years). The write down policy is highlighted in notes to accounts.

Some times there is a loss which is carried forward in the balance sheet. It appears as a debit balance on the asset side. In reality it is a negative reserve and hence networth should be reduced by the amount carried forward in the profit and loss account.

Deferred revenue expenditure

Many a time, expenditure may be of a revenue type but the benefits would accrue to the company over a longer period of time. For instance, an FMCG company can incur significant expenditure towards launching a new product. Typically the expenditure in the first year is far greater than the turnover from the product itself. Obviously the benefit of this advertisement and brand building would accrue over a longer period and it becomes difficult to apply the principle of matching concept. In such cases, accountants follow a rule of thumb and spread expenditure over 3 years, 5 years, 10 years as the case may be. While conservative companies prefer riding off revenue expenditure as soon as possible, the companies where management would like the profit figures to be higher (it may genuinely believe that the higher profit is fair figure and a better reflection of financial status of the company) would defer riding off of certain expenditure. In such cases, the amount not written off is like an asset which appears in the balance sheet. The amount written off every year is like depreciation, which is reduced from the value of the asset in the balance sheet and charged to profit and loss account.