## Financial Management for Managers Professor Anil K. Sharma Department of Management Studies Indian Institute of Technology, Roorkee Lecture 06 Financial Planning and Forecasting Part 1

Welcome all, so now next part of our discussion is the Financial Planning and Forecasting. The next thing after talking about the fundamentals of finance of the financial management or the role of CFOs or the financial managers. Next thing we will be learning about is, that is the financial planning and forecasting.

Financial planning and forecasting is a very, very you can call it as demanding area in the financial management because financial planning and forecasting is a continuous process, it is a regular process, it is a continuous process and whatever the financial requirements of any business forms are, they depend upon this planning and forecasting process.

If we are not properly planning, if we are not properly estimating how much funds are required over a period of time then, we are going to put our self in trouble and a price is going to be paid by firm also. So, you must think here about, that when we are talking about the financial planning and forecasting, how much investment we are going to make?

Normally, just to means plan for it and just to means estimate the financial requirements. We divide that requirement into two parts. Because whatever the investment we make in the business, that we make in the two kind of the assets.

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They are the fixed assets and they are the current assets. So, whatever the funds we generate from the market we invest them into the fixed assets we invest them into the current assets. So, the total capital coming to us here in the firm is total capital, maybe the total funds you would say capital oblique funds, they are coming to us from the all the sources whether they are owned sources like share capital or they are coming from the borrowed sources like loans, from or you call it as the loans from financial institutions or normally which we call it as the long term loans coming from the financial institutions. These total funds had to be properly invested properly managed. So, that the ultimate objective of the value maximization of the firm can be attained.

So, you must be wondering that when we have decided the fixed assets label, we have already made the investment into the land, plant, building machinery, furniture, vehicles all the fixed assets. Can we change it next year? No, we cannot change this investment next year. You have made this investment, so it all depends upon if we are going to make the desired amount of production and sales in the market you can say that we are going to make the best utilization of our plant and machinery, building plant and machinery.

But if the sales are more than the level of the assets and if it is only temporary phenomena we try to means carry on the process with the overtime or with the excessive misusage of the machines and the plant. But if it is going to be a regular phenomenon, then certainly we need to make additional investment and then we think in that way and then we means think of restructuring the whole our manufacturing process and we add up the new manufacturing capacity.

So, that we will look forward for the new financial planning into the long term say requirement of the firm and say thinking of investing long term funds into the fixed assets. But if everything remains fixed, your sales are also as they are in the say past years, your level of production is also the same. So, there is no need to think of changing any kind of the fixed assets or say changing the investment into the fixed assets. But the investment in the current assets is a day to day affair.

Current assets like, when you talk about the current assets, current assets arise out of your manufacturing and selling process in the market. Current assets like we have the one current asset is the inventory, then you have the say your another current assets are the credit sales which you call it as coming out of the credit sales and they call it as the sundry debtors.

Then you have the, another current asset is the advanced deposits with the suppliers, different kind of the suppliers. We have another kind of the say current assets in the, in the form of your say cash even you can call it as cash at bank, we want to keep the cash at bank and we want to keep the cash in hand. So, all these are the assets which are called as the current assets.

You have the sundry debtor, similarly there can be another asset which is called as accounts receivables, there is another current assets. So, this current asset part short term investments, current investments they need the regular planning and forecasting process. Because your inventory depends upon the sales, your credit sales depend upon the total sales, your advance deposits to the suppliers depend upon the quantity of the material we are going to buy from them. Similarly, the amount of the cash we are going to keep in hand and keep it in the bank that also largely depends upon the sales.

So, I would agree with you or means normally with everyone that yes, when you are talking about the financial planning and forecasting in the normal course, we do not disturb our long terms assets or the fixed assets or the long-term investments. But as far as the short-term current investments are concerned there we have to means perform this function almost on the say monthly, daily, weekly or yearly basis.

You have to manage it for example, I am saying daily means if you have the surplus cash and our budgeting horizon is on the weekly basis and we know that in this week we have means, we are

requiring certain amount of the cash and we know that this cash is going to available easily available with us.

So, that surplus amount of the cash is going to be available that we have to invest somewhere in the market and these days because investment avenues have means come up in the market like, in the money market like that where you can invest your surplus cash even for 24 hours, even for 24 hours and you have surplus cash today you give it to some body he will make use of it return you after 24 hours with some interest or with some appreciation on it.

So, what you have to do is, you have to means plan and forecast on the daily basis, on the weekly basis, on the monthly basis, on the annual basis. So, it means because ultimate purpose is attaining the overall goals of the firm, overall performance of the firm. What is a target we have set for this current year, target you can set in terms of your total sales, cash sales, credit sales, profitability, cash position.

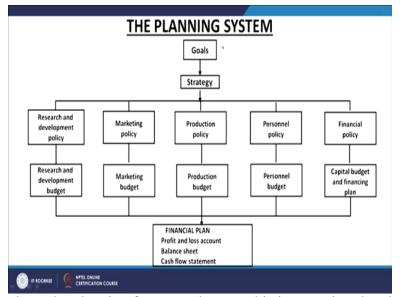
All these targets we set and for achieving those targets, your continuous financial planning is most important because as I told you finance is a life blood of any organization. So, if the funds are available in the right proportion, in the right quantity at the right time, then certainly other things are going to respond.

If you are not able to give the funds to purchase department to production department to marketing department, then what kind of the performance you are expecting. If the blood is not going equally to my hands, to my say eyes, ears, body other parts of the body, my legs then means some part, when there is a problem in the blood circulation that part of the body starts getting effected.

So, it means I have to be very careful that how much food I have to take, how much walk I have to do, how much other, if medicine any required if how much medicine I have to take and how much work I have to do, how much sleep I have to take.

Same is a case with the business organizations that it also have the different organs. It is like a we call the business as the artificial human being, it is a artificial person and it also has the same structure as the human body has and the finance is its life blood.

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So, when you talk about the planning for example, now this is an entire planning system. We are starting with this this planning system is the top of the planning system is its goals. What is goal of the firm, if you talk about the strategic long term goals it can be that for example some say group of the three friends they started a sole proprietorship today, or maybe not a sole proprietorship, but a partnership firm and their goal is that within next 10 years, we want to convert that into a say not at least international but a national level company.

Think about the Infosys, those several friends when they created the Infosys, Narayana Murthy and his other friends when they created this company initially, they created it at very with the means started their business operations at very very small level. But today the share of the Infosys is listed even in NASDAQ. So, the growth is very very spectacular and that is the long term strategic goal.

But here we fix up the goals as per the, say the different durations of the companies and the normal duration of the company is one year. Company's performance is one year that in the next one year how much we are going to manufacture? How much we are going to sell in the market? How much is going to be our profitability? How much is going to we are going to return to shareholders as dividend? And how much we are going to reinvest in the business?

At what rate we are going to grow in the market in the next one year or if our sales level is for example for say currently we are selling for half a million rupees, then next year we should be selling for the 600000 rupees in the market. So, that goal we have to set in the market. So, the financial planning the system requires that goals, when you set the goals to achieve those goals you form the strategies.

That to my, means achieve, that ultimate goal of my increased sales, increased profitability, increased return to the shareholders, increased sales, increased market growth, I have to have some strategy, I have to make some strategy and that strategy when you frame or you make you make that strategy not only with regard to finance department, you make the strategy with regard to all the departments.

Say for example R and D is the one, where we start thinking about say improving the product first we design the product take it to the market, see the customer response, we get back to the lab than we again modify the product and then we again perform the R and D operations.

Then second is, once the product is ready we have do, go for the marketing of the product. So, we have to have the marketing policy, production policy, personal policy and apart from that above all is a financial policy. Because everywhere you need to provide the funds everywhere we have to give the funds R and D is not possible without the R and D budget and providing the sufficient required amount of the funds for the R and D operations.

Your marketing is not possible, marketing activities are not possible until unless you provide the required amount of the funds for the marketing of your product. Similarly, your production is not possible if the production budget is not there sufficient amount of the funds are not provided by the finance department. Similarly, is the personal department or HR department and finally we talk about the say making long term investment in terms of the long term asset.

So, we need the say capital budgeting operations and everything if you put it in a nutshell and you translate it into the financial terms, so you call it as financial plan. Financial plan total investment to be made in any business firm in the different departments and finally we will start with the R and D operations, we will end up with taking the product to the market and taking selling the product to the people and giving the after sale service to them and means making all these investments.

Ultimately what we are going to do we are going to manufacture, we are going to sell, we are going to get the revenue, we are going to recover the cost, we are going to have the profits and

we are going to reinvest the profits back into the business and we are going to increase the scale of operations.

So, the ultimately this goal strategy where we have the different departmental budgets and strategies then finally we end with the financial plan. That too, achieve our this goal at the top level how much funds are required to be invested in the business because there are the financial requirements of all these departments. So, finally we convert these financial estimates into our projected financial statements.

Financial planning means, we start thinking in the form of the budgets all kind of the budgets we prepare and these budgets then converted into the production and sales estimates and then finally we convert those estimates into the projected financial statements and when you prepare the projected financial statements you prepare the profit and loss account projected profit and loss account for the, if you are already into the business, if the business have already started be keep on preparing for the next year's projected financial statement.

But if the business is at the conception stage, I told you in the previous class also that if as new entrepreneur if you want to start a new business and we seek the investment from the different sources, different avenues we have to go and tell them our strategy our plan, our project report, we have to get prepared a DPFR, Detailed Project Feasibility Report and with that DPFR we have to go to different financial sources including venture capitalists and we have to give them a presentation and they would like to means, know about that what is about the financial projections.

So, you have to prepare the projected financial statements for the next almost 10 years your income statement balance sheet, cash flow statement. Show them that this is the, my financial projections and this is how my business is going to respond over a period of 10 years. But we are already into the business the if the firm is already adjusting at least for the next 1 year planning, we have to do and we have to create the projected financial statements for the, current year we are already into the business we will manufacture sell we are doing that.

We will prepare a real financial statements at the end of the accounting period or that financial year. But for the next year also at the same time we keep on preparing the projector financial statements which are three, projected income statement which has two parts trading and profit

and loss account. Then you have the projected balance sheet and the projected cash flow statement. So, this all becomes possible because of a very very meticulous and very very say thought about financial planning.

	<u>STRATEGIC PLAN</u>	
Corporate Purpose		
Corporate Scope		
Corporate Objectives		
Corporate Strategies		
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Strategic plan, strategic plan when you talk about is, it means I was just talking to you about it is a very long-term goal. Today we are starting this firm as a partnership 3 people are joining hands and they are starting any firm for example xyz limited or maybe a xyz partnership firm and they are planning, that 10 years down the line we will take it up to the national level, where our presence will be at the national level and we will be competing the large bigger companies, who are in the market for the years to means years in the past.

Talk about say for example, Nirma story, I was discussing with you. Karsanbhai when created Nirma in 1982. He also must have that dream in his mind or I can say that he must have not thought about that the growth of this company will be so spectacular that in the say in 1982 and today where we are means just how many about 35 years back or 37 years means back this company was started, today they are into in multi, in many areas and it is a full-fledged company at the national level. Even, Nirma products are not only selling in India other say neighboring countries also I have seen these products are selling.

So, it means if you are manufacturing in India and selling in the other countries at least you can be called as a international company. So, that is called as, where you are starting from where you want to see yourself at the end of 10 years in future that is called as a strategic plan, long term plan and that has the important components. What is the corporate purpose you want to grow what is your scope, how you want to grow, what different activities you want to perform, and within that scope you want to grow and reach at a point where you want to reach after 10 years, corporate objectives you have to decide and then the corporate strategies you have to decide.

So, strategic plan has to be bifurcated into the annual plans and when you plan in the light of your enemies plan, your competitors plan, they are called as the strategic plans and these days planning is not a simple planning, because there is not even a single sector, where you can see that your competitors are not adjusting, wherever you think of moving into your competitors are already there in the market, when your competitors are there in the market, it means you have to beat the competition. So, it means you have to strategically plan and your simple planning has to be called as the strategic plan.

So, long term planning, very long term planning is a strategic plan and then corporate strategies you have to make. So, what is your purpose where you have started where you want to reach what different kind of the product or services you want to manufacture or create and what are the different objectives you want to, you have the growth objectives or you have the short term profitability objectives and to achieve those objectives you have to now go for the say forming the corporate strategies.

So, that on the annual basis the plan, the strategic plan that you make, that is called as the corporate strategy. So, this is a part of the entire financial planning process. Components of financial plan, when you talk about the components of financial plan you start thinking about the means your firm and the area in which your firm is operating at the national level. Economic environment in the country, economic assumptions economic environment in the country is going to behave how in the next one year.

One indication we can get is from the budget documents of the government every year when the government presents the budget on the first of the February. That budget of the government gives a directions to the industry, to the different sectors that how the government policies are going to be in the next one year which sectors are going to be the priority sectors, which sectors are going to be the more favored sectors, which sectors are going to be the commonly means accepted sectors and were the government attention is not much.

So, those means, say those directions, those say initiative or you can call it as a indications from the budget, that budget document that is number 1, second thing is the general economic environment in the country and impact upon the general economic environment in the country of the international economic environment. So, all these things we have to keep in mind while framing the policies for the next one year.

So, on the basis of that, once you know that how the market is going to behave in that sector in which the firm, for which we are planning is going to means be how much we are currently selling in the market? How much we are expected to sell in coming year in the market? What is our current market share? Whether it is going to remain static? It is going to grow, at least it should not decline, if it is going to increase at what rate it is going to increase? We have to be careful about that.

So, sales forecasting is the basis after just having the economic assumptions, economic say you can call it as idea in your mind you have to now start thinking about that keeping in (())(20:36) this environment globally and its impact on upon India, on our country and that to on our, say our industry as well as the company.

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So, what we have to do is you have to do sought of one analysis, which we call is as this EIC analysis. This is called as EIC analysis, E means economy then this is economy you call it as I as

industry and C is the company. So, you have to do this analysis continuously because planning and control they are based upon the regular analysis.

So, economy industry and company analysis we have to do and on the basis of this analysis, you have to then think about that whatever the economic environment is building around us. How much sales we are going to make in the next one year. That is the beginning point of your financial planning.

Sale forecasting, sale forecasting is your beginning point of the financial planning and keeping the sales as the common denominator, then you have to start back tracking that for attaining this much level of the sales, how much is going to my cost of production.

Whether the right amount of the inputs are available with me or not, how much is going to be cost of production and then if this is a total sales revenue available. This is my cost of production is going to be then finally how much is going to be the gross profit available with me.

Then after maybe adding into the operating income, the non-operating income from different sources and subtracting the non-operating expenses, how much net operating profit before tax I am going to have and subtracting the tax amount from this, how much net operating profit after tax I am going have.

So, with the help of these different components of financial planning you have to read the economic environment globally at the country level, do the EIC analysis, forecast the sales for you, prepare the pro forma financial statement, pro forma financial statements in projected financial statements for the next 1 year, that is a planning horizon currently you are doing your business. So, it means you are into the actual business and you will prepare the real financial statements along with that you will prepare the projected financial statements for the next one year.

So, that before we move into the first day of the next year, we already have something in our hand the planning document in our hand the budget in our hand and we know that what is our planned target of manufacturing and selling in the market. How much cost of production is expected to be there, what is the level of gross profit then the say net operating profit before text and after text this all is means the planned document is available with us. And finally that pro

forma financial statements will be used as a guide while we move for the real performance in the market from the next year onwards or for the next whole of the year.

Similarly, there might me a possibility that sometimes when there is a means, say more than normal change in the sales is expected in the market. So, we can say if change is going to stay forever, then we have to increase the production capacity, so we have to add up some more long term assets.

Or sometime we can think about our productions will remain the same, but your sales will come down, when the sales will come down your inventory will increase, your inventory is another current asset. So, to accommodate that increase inventory what you should do?

So, you have to plan for everything in the beginning and to have that required amount of productions sales, revenue and cost you have to have the proper financing plan. How much funds we required for, means giving shape to our plan and how much funds are available internally how much we have to borrow from the outside sources and finally you have to convert that in into the cash budget.

Because only funds will not serve the purpose estimates will not serve the purpose you need to prepare the cash budget in the first year in the first month or in the first operating cycle how much investment is it required is it to be made how much cash is required into invested into it. For example we are talking about say the part of the raw material will be available as say the spontaneous finance, by the suppliers credit and 30 days we need not to pay to the labor, 30 days we need not pay to our employees, 30 days we need not to pay to our this power and water suppling companies and others.

So, after 30 days we have to we have to pay. So, proper cash budget you have to prepare, so that you know that how much is my cash investment requirement, how much cash I have and from where that cash has to come. So, total starting at the macro level and going up to the minute level that is a cash budget. So, giving the shape and calculating the cash requirements availability of the cash working out the cash shortfall.

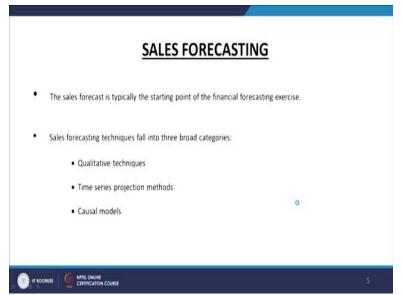
So, that when we know in advance that we are going to be cash surplus at the end of the first moth of next year or we are going to be the cash short, we are going to be cash surplus you should do it advance were that surplus cash has to be invested in the market and if you are going to be cash short from where that cash will be arranged. So, that all will be possible will be facilitated if you know the process of financial planning properly.

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COMPONENTS OF A FINANCIAL PLAN	
Economic Assumptions	
Sales Forecast	
Pro forma Statements	
Asset Requirements	
• Financing Plan	
Cash Budget	
	4

Now, first thing is that different things we have discussed here, one by one in the summarized form I will discuss with you, in this part of this class and the next class also. That what is we mean by the sales forecast?

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When you talk about the sales forecasting, sale forecasting is a back bone of the efficient budgeting, if you know at least annual budgeting, if you know the sales correctly or near about

the correct figure of the sales other things becomes very easy because keeping it as a common denominator you have to then start backtracking that now if this is we are going to sell in the market it means how much we are going to produce, sales minus profit is a cost of production.

How much we are going to produce in the market? How much is our input requirements in terms of quantity and in terms of finance? So, all these things we can workout. So, the sales forecast is typically the starting point of the financial forecasting exercise, it is written here. Sales forecasting technique fall into 3 broad categories it falls into 3 broad categories qualitative techniques, time series projection method and Causal models.

Qualitative techniques are just means it is observation by the experts who are the part of the say you can call it is as the sales forecasting team, they can just look at the data available with them or sometime they can visit the market and they can see the competitor products and the other features the competitors are adding into their products and they can just means by just studying the qualitative say features of our own companies products and the other products adjusting in the market they can make out that how the sales are going to behave in the time to come.

Whether we are going to have more challenges in terms of adding more features to our products or the sales we are going to make in the market. How the sales are going to behave? Are we going to sale the same amount? Or are we going to increase our sales or sales are going to go down in the market?

So, the qualitative analysis can be done but this is not the job of a layman, this is the job of the experts, how are experts in planning and just planning for the sales, they are very good consultants, they are very good.

That are just by looking at the adjusting data and adjusting say presence and the structure of the market, number of competitors in the market the company who's sales we are forecasting there share in the market everything means they know, they can tell on the base of data and some time by visiting the market and looking at the competitors products that the sales of your company are going to be means going to remain static going to grow in the market or going to come down. So, this is one technique, second is the time series projections method.

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If you plot your sales, your company sales on a paper for the past, or for the next number of years. For example, we are having number of years 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 years we have the past 10 years data. We are going to plan for the 11th year. So, you have got this you have got the sales of 10, then it is 12, then it is again 12, then it is 13, then it is 13, then it is 14, then it is 16, then it is say you call it as again 16, again 16 and last year we have sold for the 17 hundred thousands. This is a total amount of sales. This is a 1700000 we have sold in the market in this year.

On the basis, of this past year 10 years say time series data you can work out the strength and easily you can find out how much we are going to sell in the 11 th year. Same, I am not talking about any other companies comparison our own company comparison we can make out that our sales were how much in the past 10 year on the basis of the past 10.

You can talk about the year to come that how we are going to means behave or at this time maximum if you want to improve this one more thing you can do is you can do you can supplement your time series data with the cross sectional analysis.

You can do the cross sectional analysis, you can do the cross sectional analysis also. So, if you do the cross sectional analysis with the help of this means cross sectional analysis when you talk about what we include in the cross sectional analysis, the comparison if our company sales with the our competitors in the market.

So, you can find out that how much we are say are selling for the past 10 years. So, on the basis of that you are going to say forecast for the eleventh year and at the same time, you can supplement this data with the cross sectional analysis, how your competitors are performing in the market and then you can say in the eleventh year how much we are going to sell.

Then the causal methods, causal methods are like sale of in one say product because of increasing the sale of one product because of the other products. As the number of mobile subscribers is increasing in the market, number of mobile handsets will also go up in the market. So, this is the causal relationship. When the need for the one thing increases, need for the, automatically the another thing also increases.

So, just by establishing a causal effect relationship, you can say that for example we have the data of the mobile subscribers. If we are in mobile manufacturing company, we are the mobile phone manufacturing company and we want to find out that in the next 2020, how much say mobile sets will be required in total in the market and what fraction of that will come to us.

So, you can simply there are number of ways but one way is that you can have the data from try or maybe from other sources that at what rate your telecom, this mobile subscribers are increasing in the market. On the basis of that, you can make out that what will be the demand for the handsets in the market and adjusting number of sets we are selling in the market how many new sets we will be selling in the market. So, cause and effect relationship is another. So, I would cation you here, not one technique, is sufficient in say isolation. You have to have the mix of the techniques and then go for the sales forecasting. Sales forecasting is the backbone, if the sale forecasting is correct then everything is going to be means nearer to the correct figures.

But if the sales forecasting is wrong, your means the wrong sales forecasting has even got the capacity to kill the (())(32:07) functioning organization. If your sale forecasting what happened in case of the say anchor industries fruit bear project. Sales forecasting went wrong, they thought that there will be ampled demand in the market, sufficient sales the company will be able to make in the market and nobody purchased the product, all 350 crores went down in the vain.

Means why this Idea and Vodafone joint venture was created, they must have planned that next year we will be having this much of the subscriber, adding to our subscribers list. They must not even thought of that Jio will come into the market and when Jio came in the market what to talk of increasing the sales. Even say means the protecting their adjusting sales became a challenge to them.

It became a challenge for the leader Airtel into the market, it became a challenge to Idea and Vodafone, they had to join hands. So, all these economic environment changes at the global level or the national level, they created the problem. So, assessment of forecasting of the right amount of the sales is the beginning of the right kind of the financial planning and always be careful about that if your sales forecasting is correct, other things will fall in the line. So, I will stop here for this financial planning and remaining part of the discussion on the financial planning, I will discuss with you in the next class, thank you very much.