

Cost Accounting
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Lecture - 17
Cash Budget

[FL], in last two sessions we have been discussing about budgets. So, I think you already know that budget is a very important technique for planning as well as control. Firstly, budgets serves a very good base for a planning you have your goal, the goal is divided and stated in a form of a quantifiable objective or a financial measure, then an overall goal is divided into functional areas. So, we prepare based on the master budget we get go to sales budget, then we go to budget for each function and then each functions budget is well coordinated with each other.

So, in the last session we had discussed that if sales is 24000 considering the stock requirements we go for production, then whatever is the requirement for production accordingly we go for purchasing of raw material. So, there is no excessive spending of any resource. So, we tried to see that there is an optimal allocation of resource and the functioning of each of the division is well coordinated that is achieved in the budget. This also serves as a control purpose because once the actuals are ready we compare the budget with the actual and try to take quicker corrective action, I hope you remember all these things

Now, let us go for one more step in functional budget, we prepare the budget for various functions based on all these budget we prepare what is known as cash budget. Now, cash budget is an estimated statement for cash in the next quarter or next 6 months or next 1 year. Now, according to cash budget we come to know what is likely to be the availability of cash. So, that if there is an excess cash we can invest it in a fruitful manner instead of keeping it idle and more important if there is a shortage of cash we can make an arrangement for the cash on time. That is very important thing because if you do not make timely arrangement in the last moment company will realize that there is a cash shortage.

And cash shortage has many negative consequences because we will fail to pay our suppliers or employees on time they will be unhappy bad name will spread about the

company. In worse cases there are also cases where company becomes bankrupt because if it fails to pay creditors or bankers on time, then those parties will go to court against the company and there are instances where even very good companies have become bankrupt because of poor cash and working capital management.

So, there is one part of functional budget that is known as cash budget, it serves as a basis for scientific estimation of cash requirement not only for the whole year, but broken down month wise or quarter wise ok. Now, this is a bit tedious calculation not very difficult, but you will have to do a lot of calculation because each and every budget will have to be incorporated.

We will have to see the credit terms as to when the payment is to be made how much is a credit period allowed by the creditors or how much credit we give to our customers based on all these we calculate the availability for cash ok. Let us take the case I hope you can solve it even though it might be the first case you can just read it carefully and solve it, but please take a printout and try to read it along with me ok.

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The screenshot shows an Excel spreadsheet with the following content:

1 Question
Vaibhav Ltd. a newly started company wishes to prepare Cash Budget from January. Prepare a cash budget for the first six months from the following estimated revenue and expenses.

2

3 All Figures in Rs

4 Month	Total Sale	Materials	Wages	Overheads	
5				Production	Selling & Distribution
6 January	20,000	20,000	4,000	3,200	800
7 February	22,000	14,000	4,400	3,300	900
8 March	28,000	14,000	4,600	3,400	900
9 April	36,000	22,000	4,600	3,500	1,000
10 May	30,000	20,000	4,000	3,200	900
11 June	40,000	25,000	5,000	3,600	1,200

12 Additional information
Cash balance on 1st January was Rs 10,000. A new

Now, Vaibhav limited a newly started company wishes to prepare a cash budget from January; prepare a cash budget for the first 6 months from the following estimated revenues and expenses. So, sales are given for each of these months all the figures are in rupees from January to June you can see sales are slowly picking up from 20,000, then

22, 28, 36, 30 and 40. So, sales are consistently going up, the requirement for material is 20 then it went down then again it increase.

So, they would have prepared a raw material consumption budget which is given over here. Then budget for wages which is more or less constant slightly increased, then the production overheads which are again somewhat constant selling and distribution overheads. So, all the estimated profit and loss figures are available.

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	A	B	C	D	E	F	G	H
10	May	30,000	20,000	4,000	3,200	900		
11	June	40,000	25,000	5,000	3,600	1,200		
12	Additional information							
13	Cash balance on 1st January was Rs 10,000. A new machinery is to be installed at Rs 20,000 on credit, to be repaid by two equal instalments in March and April, sales commission @5% on total sales is to be paid within a month Rs 10,000 being the amount of share allotment may be received in March. Share premium amounting to Rs 2,000 is also obtained with the Share Allotment. Period of credit allowed by suppliers — 2months; period of credit allowed to customers — 1month, delay in payment of overheads 1 month. delay in payment of wages ½ month. Assume cash sales to be 50% of total sales.							
14								
15								

Now, there is some additional information that in the beginning that is on 1st January they have a cash balance of 10,000. New, machinery is installed at 20,000 on credit and that is to be repaid in two installments in March and April, sales commission is 5 percent of the total sales to be paid within a month. Then rupees 10,000 is the amount of share allotment may be received in the month of March.

So, I hope you know about share allotment when a company issued shares many people show interest by way of applying for the shares, then company allot them shares and next installment they pay in the form of share allotment money. So, companies likely to receive 10,000 from the shareholders in the month of March. Along with the share capital they will also pay share premium, so share premium amounting to 2000 is also obtained with share allotment. In other words we will receive 10 plus 2 that is 12,000 in the month of March, then these credit periods are very important.

Period of credit allowed to suppliers is 2 months; period of credit allowed to customers is 1 month, delay in the payment of overheads is 1 month; delay in the payment of wages is half month. Assume cash sales to be 50 percent of total sales, so out of the sales 50 percent are cash 50 percent are on credit. Now, with this much of information try to prepare a cash budget are you ready ok. As I told you; you must have a printout take it carefully go on marking each item, so out of the given sales and expenses which amount is payable in which month we will have to calculate and then make the budget.

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Particulars	Jan	Feb	Mar	Apr	May	Jun
Opening Balance (A)	10,000	18,000	29,800	27,000	24,700	33,100
Add: Receipts (B)						
Cash Sales (50%)	10,000	11,000	14,000	18,000	15,000	20,000
Collection from debtors	---	10,000	11,000	14,000	18,000	15,000
Share Allotment (including st	---	---	12,000	---	---	---
Total (A+B)	20,000	39,000	66,800	59,000	57,700	68,100
Less: Payments						
Materials	---	---	20,000	14,000	14,000	22,000
Wages	2,000	4,200	4,500	4,600	4,300	4,500
Prodn and SD overheads	---	4,000	4,200	4,300	4,500	4,100
sales commission @5%	---	1,000	1,100	1,400	1,800	1,500
Installation of Machinery pur	---	---	10000	10000	---	---
Total Payments (c)	2,000	9,200	39,800	34,300	24,600	32,100

So, far your ease out just shown you a structure, prepare a cash budget for 6 months. So, you will need to make 7 columns particulars and then January to June just to give you a hint I will given you a opening balance in the beginning, it was given that the opening balances 10,000. These are the balances for the next months calculated by me, but I do not think you need them, so I will hide them. Fine, but you have opening balance for January which is given.

Now, go on making estimation for receipts and expenses and with each of the available information you can make a cash budget ok, so we have opening balances. Now, as far as the income is concerned our major income is; obviously, sales. Now, from that we get two types of receipts we have got cash sales which are 50 percent of sales and remaining 50 percent is credit sales ok. So, we will add two things here cash sales 50 percent,

collections from debtors that is money which will come from credit sales in the next slide because they would come in the different months.

Now, let us go to the sales; sales are 20, 22, 28 and so on. Now, if you just take the sale of January 20,000, when will you receive cash from it? As per the given data assume that cash sales are 50 percent of total sales; that means, from 20,000 cash sales are 10,000 that you will receive in the immediate month same month and remaining 50 percent that is remaining 10,000 is sold to customers on credit the period of credit allowed to customer is 1 month ok. So, out of 20 50 percent is 10 received in the same month remaining 10 will be received with a lag of one month. So, we will sell it on credit, we will receive nothing in that particular month, but we will receive it in the next month getting it ok.

There might be some bad debts and RDD and so on, but no such complications are given in the case very simple calculation out of total sales 50 percent for cash and remaining will be sold on credit which will be month received after 1 month fine. So, it is very simple you know that that total sale is 20 of that 50 percent that is 10 will come here 10 will come here fine. Now, do it for all this for your understanding I am just pasting the sales here do not write it now this is just for your calculation sake. So, I have written your sales like this as per the terms 50 percent will be received in the same month remaining 50 percent in the next month.

So, how much will be in the month of Feb now? 11,000 and remaining 11,000 will be received from customers in March. So, I hope you are getting it very easy, so 14; 14. So, like that actually go on writing 18 in the same month April remaining 18 in March 15; 15 and 20 remaining 20 will go in July which we are not recording are you getting it please write it along with me do not just sit and look at the case. So, this is cash sale and credit sale, now shall I remove this; this is no longer required I will just put it in different color for your understanding later on will remove this.

If you are getting too much confused you can make a separate working note below, but I think its not required because it is 50; 50 percent you can directly write it in the cash budget ok. Now, is there any other receipt? Answer is yes there is some money received from share allotment along with the share premium there on. So, go to the case how much money is going to be received? 10,000 as a share allotment money to be received in March along with the premium of 2000.

So, share allotment this is going to be received only once that is in the month of March dash in all the months fine, is there any other receipt? I think there is no other receipt, but there are a few other payments expenses as well as machinery. So, you can make the total of payments now sorry receipts now this 10,000 plus 10,000, so total is 20,000. In the month of February how did you get 39? Actually you would not be able to get because it is A plus B, A is not yet known to you we will calculate and then you will come to know [FL]. So, I will remove this sales I think now you no longer needed fine.

Now, let us go to payments. Now, which is the first payment? Material, so you are being given material cost for all the months. How are the payment terms? It is given that period of credit allowed by suppliers is 2 months. So, January purchase of 20 you do not have to pay in January, you do not even have to pay in February; you can directly pay it in the month of March [FL]. So, if you go for material cost add a row there for material no payment in January; no payment in February directly write 20,000 in the month of March.

So, if you go here you have got 20, 14, 14, 22, 20, 25, so these four amounts only will be paid from the beginning of March; March, April, May and June fine. So, please write it now here 20, 14, 14, 22 fine getting it. Now, next one is wages. Now, what are the terms of payments for wages? Wages are given for all the months, do you pay the wages in the same month they have given that delay in the payment of wages is half month. So, how will you calculate? In other words half of the wages will be paid in the same month remaining half is paid in the next month. So, out of 4,000 of January paid 2,000 in January remaining 2,000 in February and so on.

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	A	B	C	D	E	F	G	H	I
16									
17									
18									
19	Wages	4,000	4,400	4,600	4,600	4,000	5,000		
20		50%	2000	2200	2300	2300	2000	2500	
21			2000	2200	2300	2300	2000	0	
22		2,000	4,200	4,500	4,600	4,300	4,500		
23									
24									
25									
26									
27									

Now, well for your simplicity we are made a small working note here if required you can also make a working note. So, I have written wages then compute the 50 percent or right pay them in the same month remaining 50 pay in the next month fine. So, these are the wages for all these months starting from 4000 50 percent are to be paid in the same month. So, 2000 and remaining 50 percent is to prepaid with a lag that is in the next month fine.

So, this 4000 is broken down into 2000 and 2000, 4400 is broken into 2200 and 2200, half in the next month; half in the same month; half in the next month are you getting it. So, make the total now, so the total of wages I think this figure is not visible here. So, basically you have to take total of 2000 and nil, so it will become 2000, I will just copy this fine. So, in the month of Jan you only pay half the wages and from February onwards half of the same month half of the next month fine.

So, please write the wage related figures here are you able to get it fine. So, all these figures are calculated here. Now, the next one overheads; however, overheads paid; overheads is very simple there is a delay in the payment of one month. So, this month overheads are period just paid in the next month directly. So, nothing in the first month that is January you will pay the January overheads in February. So, you can just write in the next month all these figures.

So, there will be dash in the first month January and February onwards pay the overheads for the earlier month that is January 4000 will be paid in Feb, February 4000

paid 4200 will be paid in March and so on. Same way for both production overheads as well as the selling and distribution overheads fine getting it. I will just write the figures or the heading properly, I hope you are able to solve it with me ok. So, the total overheads production as well as selling distribution overheads are this figures, you can go here and the total overhead for each month is transferred and paid in the next month.

Now, any other payment is involved just read the case carefully there are some more payments like for machinery and there is also a payment to be done for commission. So, sales commission at 5 percent on total sales is to be paid within a month. So, if you look at the sales which is 10,000 for January then you need to pay the sales commission.

So, the next payment which is sales commission at 5 percent it is stated that it will be paid within a month; that means, it is to be paid with a lag of a month not in the same month within a month that is in the next month. So, on the sales which was 20,000 in the month of January 5 percent commission. So, 20,000 into 5 percent; that means, 1000 will be paid in the month of February.

So, I have already stated it here sales commission at 5 percent and write it in the next month. So, dash in January, 1000 in February and so on ok. So, take this sales figure and take 5 percent of that are you able to do it, if you want to see the sales figure I can just make it visible to you fine for each of the sales figure it is 5 percent. Any other expense or payment yes because you are to also pay for the purchase of machinery.

Now, how much is amount? It is given that total machinery installed is 20,000 and it is to be paid in two equal installments in March and April fine. So, 10,000 in the month of March, 10,000 in the month of April this is the total amount which is paid. Now, since all payments are over check whether any other payment is left, but I think all are done take the total of payments. So, 2,000 is the only payment in January in other months take the total 9,200, 39,800 and so on are you able to get it.

So, you can realize that due to the availability of credit the payment in January was very very less only half of the wages, in February also it was relatively small some of the operating expenses, but from March onwards there was a lot of lot of requirement of cash, particularly because material is to be paid with a lag of 2 months we also had to pay for machineries etcetera. So, the total payment from March April were high again this were slightly less in May and again the increase in the month of June fine.

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	A	B	C	D	E	F	G	H	I
4	Opening Balance (A)	10,000	18,000	29,800	27,000	24,700	33,100		
5	Add: Receipts (B)								
6	Cash Sales (50%)	10,000	11,000	14,000	18,000	15,000	20,000		
7	Collection from debtors	---	10,000	11,000	14,000	18,000	15,000		
8	Share Allotment (including st	---	---	12,000	---	---	---		
9	Total (A+B)	20,000	39,000	66,800	59,000	57,700	68,100		
10	Less: Payments								
11	Materials	---	---	20,000	14,000	14,000	22,000		
12	Wages	2,000	4,200	4,500	4,600	4,300	4,500		
13	Prodn and SD overheads	---	4,000	4,200	4,300	4,500	4,100		
14	sales commission @5%	---	1,000	1,100	1,400	1,800	1,500		
15	Instalment of Machinery pur	---	---	10000	10000	---	---		
16	Total Payments (c)	2,000	9,200	39,800	34,300	24,600	32,100		
17	Closing Balance (A+B-C)	18,000	29,800	27,000	24,700	33,100	36,000		

Now, look at the availability of cash, first of all for each month compute the balance. So, how will you know the balance because you know the opening balance 10, for the month of January you can take the total cash available 20 minus 2. So, closing balance of January is 18, that closing balance will be the opening balance for February got it. Now, 18 plus 11 plus 10, so total is 39, compute the closing balance for February which is 29800 are you getting it 39 minus all the x total payments which is 9,200.

Now, this 29,800 see the availability of cash has increased substantially first it was 18, then 29800 that will become the opening balance for March. Now, in the March the total available cash is 66,800 minus the payments. So, the balance is now 27 you can see here the availability was already high in the beginning of March. So, though the requirement of payment increase they could easily manage that without allowing the balance to go down substantially. So, for April now the opening balance is 27 totals total is 59; payments are 34,300, so closing balance is 24,700

Now, taking 24,700 the total of A and B is 57,700 actually the availability has slightly gone down, but because payments have also gone down the balance in hand has increased is 33,100 take it as a opening balance. So, the final closing balance is now 36,000 are you able to get it, this is how cash budget is to be prepared you will realize that this is based on all earlier budgets. So, you will have to make different functional

budgets because those budgets involve various payments and some of them give you cash.

So, first other functional budgets are made and finally, the cash budget is made this budget is particularly useful for cash management and working capital management particularly in the field of finance fine. So, this is known as a finance function for the company to estimate the cash position and accordingly make the availability of cash. Now, this budgeting exercise becomes a very important input for financial management of the company fine.

So, with this will stop here [FL].