Foundations of Accounting & Finance

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Week - 02

Lecture - 08

Preparation of Income Statement and Balance Sheet: Example - Part III

Introduction

Now, let us move from the transactions of April to May. The balance sheet remains unchanged on May 1st. Essentially, on the morning of May 1st, the balance sheet reflects the same assets and liabilities as at the end of the day April 30th unless there have been significant overnight changes. Consequently, the income statement for May starts with a blank slate. Given the absence of transactions on May 1st due to it being a workers' day and a holiday, there are no financial activities recorded on this date.

May 2, 2020: Rent against factory shed for the month of May paid in advance.

Transaction Analysis

The payment was made in advance, although the reason for this is not specified. The bank balance, which previously stood at a certain amount, now decreases by the amount of the rent payment, which is Rs. 50,000 in this case. Therefore, paying rent in advance results in a reduction of the bank balance.

When rent is paid in advance, it means that the money has been transferred to the landlord before the actual month of occupancy. However, if the premises are vacated before the end of the paid period, the landlord is obligated to refund the remaining amount as the tenant has not benefited from the entire term of occupancy. Therefore, advance rent paid of Rs. 50,000 represents an asset, as it indicates that the company has prepaid for the rental service, which will be utilized in the future.

May 6th: Money received from GS Steel for the transaction dated April 6th

Transaction Analysis

On April 6th, an order was executed for GS Steel, and the company was expected to receive payment 30 days later. Although there is no statement provided, it is presumed that on May 6th, the payment from GS Steel was received for the job work completed on April 6th.

The presumption is based on the understanding that the payment was due from the parent company, GS Steel. Assuming the payment was received on May 6th, the company's bank balance would increase by Rs. 25,000. Additionally, the amount receivable from GS Steel on the assets side would no longer be pending, as it would have been fulfilled with the received payment.

May 8, 2020: Payment, received in account against 10 tonnes CR supplied to Dulite. Balance payment for 10 tonnes to be received in a week (April 9, 2020)

Transaction Analysis

Referring back to the transaction on April 9th, an order was executed from Dulite for 20 tons. Now, a partial payment has been received for half of the order, specifically for 10 tons. This partial payment amounts to Rs. 5,10,000, representing 50% of the total sale value. As a result of receiving this payment, the receivable amount from Dulite has decreased, and the company's bank balance has increased by Rs. 5,10,000. However, the remaining balance of Rs. 5,10,000 from Dulite for the remaining 10 tons is still pending, as they have committed to paying it within a week. Therefore, the company is still owed Rs. 5,10,000 by Dulite.

May 11, 2020: Tanay, director, took a 6-month interest-free loan from TR STEEL of Rs. 5 Lakhs to repay a personal liability

Transaction Analysis

A director or partner can withdraw money from the company in three ways:

- Partners loan
- Drawings
- Dividends.

When taken as a loan, the capital remains unchanged, as the director or partner is liable to return the borrowed amount to the company. However, when taken as drawings, the capital of the individual decreases by the withdrawn amount. For instance, if Tanay withdraws 5 lakhs as drawings, his capital would reduce by that amount to 1.245 crores, and the company's cash and bank balance would also decrease by 5 lakhs.

Alternatively, if Tanay takes the money as a loan, his capital remains the same, but the company's bank balance decreases as it lends money to Tanay. In this case, Tanay is obligated to repay the loan to the company, ensuring the company is eligible to receive the money back from Tanay. This loan represents an asset for the company, as Tanay is liable to repay the amount. So, the company has provided a loan to Tanay, reducing its bank balance by Rs. 5 Lakhs. This loan amount signifies an obligation for Tanay to repay the company. Thus, the balance sheet reflects this loan as an asset owed by Tanay to the company.

May 14 (Refer to May 8th Transaction)

Transaction Analysis

Regarding the transaction with Dulite, the remaining balance for the 10 tonnes supplied was received in full by May 14th, as per the one-week timeline specified earlier. Assuming honest business practices where payments are made on time, it can be presumed that the entire amount due from Dulite has been received. Consequently, the bank balance of the company increases by the remaining amount Rs. 5,10,000 owed by Dulite, and the receivable from Dulite on the assets side will reduce to zero. However, if the payment had not been received by the specified date, the amount would continue to be listed as a receivable, and the bank balance would not have increased accordingly.

May 15, 2020: TR STEEL invested a sum of Rs 15 lakhs in government securities from the excess bank balance. Another Rs. 20 Lakhs were put in Liquid Mutual Fund for one month. Both investments carry an interest rate of 7% pa.

Transaction Analysis

Investing in government securities involves holding a government bond, thus representing an asset owned by TR Steel. This investment is made to generate returns and utilize excess funds

effectively. As a result of this investment, the bank balance decreases by the invested amount, reflecting the reduction in available liquid funds.

Similarly, allocating Rs. 20 lakhs to a Liquid Mutual Fund allows TR Steel to earn interest on the parked funds, as current accounts typically do not yield interest. This investment diversifies the company's portfolio and aims to maximize returns on surplus funds. Consequently, the bank balance experiences a further decrease due to this investment.

It is important to note that both investments earn an interest rate of 7%. Any interest earned from these investments will be recorded as revenue on the day it is received. However, if no interest is accrued on a given day, no revenue will be recognized for that period. As these investments mature and interest is earned, the revenue generated will contribute to the retained earnings of the company.

May 16, 2020: A Fire & Burglary Insurance policy covering fixed and current assets including the factory shed, offering a sum assured of Rs 75 Lakhs was taken against a premium of Rs 36,000 per annum with effect from 16th May.

Transaction Analysis

When purchasing an insurance policy, the company incurs an immediate cash outflow equal to the premium paid. In this case, the bank balance decreased by Rs. 36,000 due to the insurance premium payment. As the policy covers assets and potential losses, it represents an expenditure for the company. Considering that the financial statement is prepared for the month of May, only the portion of the insurance premium relevant to May is accounted for. With the policy commencing on May 16th and covering a whole year, the proportionate premium for May is calculated. Since there are 24 fortnights in a year, the premium for May amounts to Rs. 1,500. The remaining Rs. 34,500 represents the unutilized portion of the premium and will sit on the assets side of the balance sheet as an unexpired insurance premium.

May 28, 2020: Cash amounting to Rs 1,00,000 was withdrawn from the bank.

Transaction Analysis

When a cash withdrawal happens, the bank balance decreases by the same amount, resulting in a reduction in assets. Simultaneously, the cash balance increases by Rs. 1,00,000, representing the physical currency obtained from the withdrawal. This transaction affects the asset side of the balance sheet twice: the bank balance decreases while the cash balance increases.

May 30, 2020: May salaries credited to the employees and directors accounts. The four employees for manual labour were paid in cash. Other petty expenses of Rs. 4260 were settled in cash. Electricity bill of Rs. 28,500 was paid through cheque

Transaction Analysis

Let us break down the salaries of other employees: Stock manager: Rs. 20,000, Accountant: Rs. 20,000, Foreman: Rs. 15,000 (2 employees), Shed manager: Rs. 20,000, Watchman: Rs. 8,000. These salaries were also paid from the bank account. Additionally, four manual laborers were paid in cash, with each receiving Rs. 8,000. The total manual labor expense of Rs. 32,000 was paid in cash. Petty expenses totaling Rs. 4,260 were settled in cash, reducing the cash balance accordingly. Finally, the electricity bill of Rs. 28,500 was paid through a cheque, resulting in a deduction from the bank account. Further, all the salaries will also be shown on the expense side of the income statement.

Depreciation for May

Transaction Analysis

Depreciation can be calculated using two methods: the straight-line method (SLM) and the written-down value (WDV) method.

1. **The straight-line method**

Let us consider a simple example to explain depreciation. Suppose a machine is purchased for approximately 10 lakhs, and its estimated life is 10 years. Using the straight-line method for

depreciation means the amount decreases by 1 lakh each year. For example, at the end of year 1, the value is 9 lakhs, at the end of year 2, it is 8 lakhs, and so forth.

Example - Decoiling Machine (SLM)

- Original Value: Rs. 42,00,000
- Salvage Value: Rs. 4,80,000
- Useful Life: 12 years
- Depreciation per Year = (Original Value - Salvage Value) / Useful Life
- Depreciation per Year = (42,00,000 - 4,80,000) / 12 = Rs. 3,10,000
- Monthly Depreciation = Depreciation per Year / 12
- Monthly Depreciation = 3,10,000 / 12 = Rs. 25,833.33

2. Written-down value method

Under the written down value (WDV) method, the machine depreciates at 10 percent every year. In this method, the depreciation amount is calculated based on the machine's value at the beginning of each year. For example, in year 1, the machine's value is 10 lakhs, and the depreciation is 10 percent of this value, which equals 1 lakh. Therefore, the value of the machine at the end of year 1 is 9 lakhs. In year 2, the machine's value at the beginning of the year is 9 lakhs. Again, applying the 10 percent depreciation rate, the depreciation amount is 90,000, resulting in a machine value of 8 lakhs, 10 thousand. This process continues for each subsequent year. At the beginning of each year, the machine's value is reduced by 10 percent, and the depreciation amount is calculated accordingly.

For instance, at the beginning of year 3, the machine's value is eight lakhs, ten thousand, and the depreciation is 10 percent of this value, which is 81,000. Thus, the machine's value at the end of year 3 becomes 7 lakhs, 29 thousand. This pattern repeats for the following years, with the depreciation amount decreasing each year as the machine's value decreases. This method is known as the written down value or diminishing balance method of depreciation.

Example - Decoiling Machine (WDV)

- Original Value: Rs. 42,00,000
- Salvage Value: Rs. 4,80,000
- Useful Life: 12 years
- Depreciation Method: Written Down Value (WDV) Method

Year	Opening Value	Depreciation	Closing value
1	₹ 42,00,000	₹ 4,20,000	₹ 37,80,000
2	₹ 37,80,000	₹ 3,78,000	₹ 34,02,000
3	₹ 34,02,000	₹ 3,40,200	₹ 30,61,800

Monthly depreciation for May (assuming one-twelfth of the annual depreciation):

- Opening Value for May: Rs. 34,02,000
- Depreciation for May: Rs. 34,02,000 * (10% / 12) = Rs. 28,350

When using the straight-line method of depreciation, the depreciation is calculated based on the original value of the asset, not the written-down value. Let us break down the calculation for each asset:

For the Decoiling machine:

- Original value = 42 lakhs
- Salvage value = 4,80,000
- Depreciation period = 12 years (depreciated monthly)
- Depreciation per month = ((Original value - Salvage value) / (12))/12
- = (42 lakhs - 4,80,000) / (12))/12
- ≈ 25833.33

For Shearing Machine:

- Original value = 15 lakhs
- Salvage value = 90,000
- Depreciation period = 12 years (depreciated monthly)

- Depreciation per month = ((Original value - Salvage value) / (12))/12
- = (15 lakhs - 90,000) / (12))/12
- ≈ 9792

For the office equipment:

- Original value = 1,50,000
- Depreciation period = 3 years (depreciated monthly)
- Depreciation per month = ((Original value - Salvage value) / (3))/12
- = 1,50,000 / (3))/12
- ≈ 4166.67

The value of each asset is reduced by the respective monthly depreciation amount calculated above. This reduction continues throughout the year until the end of the depreciation period. Further, the depreciation amount is also shown as an expenditure in the income statement.

Interest accrued on securities

Transaction Analysis

Accrued interest applies to both the government securities and the liquid mutual fund investment. Despite not receiving the interest yet, you are entitled to it, indicating that the interest has accrued.

For example, let us calculate the accrued interest for both investments. Considering a government bond investment of Rs. 15 lakhs at a 7% interest rate for 15 days (half a month), the accrued interest is calculated by dividing the interest by 24 (representing two fortnights in a month). The accrued interest is 4375. Similarly, for the liquid mutual fund investment of Rs. 20 lakhs at a 7% interest rate for 15 days, the accrued interest is also calculated by dividing the interest by 24. The accrued interest is 5833.

These accrued interests represent potential income that the company is eligible to receive but has not yet received. However, they are recorded as assets on the balance sheet as “accrued interest on investments,” and the same will be reported as revenue in the income statement.

Advance rent paid for May

Transaction Analysis

Another item to consider is the advance rent paid for the month of May. While it may have been classified as an advance payment initially, by the 30th of May, it no longer qualifies as an advance because the benefit of the rented property has been enjoyed during the month. Rent is categorized as an expenditure, and the amount paid, in this case, is Rs. 50,000. Although the cash balance does not decrease, the advance payment no longer retains its status as an advance because the service has been utilized. Therefore, it is recorded as an expenditure, reducing the advance amount to zero.

May 31, 2020: Loan Interest payment made to ICIC Bank for the month of May 2020

Transaction Analysis

The interest on the loan is calculated at a rate of 11% per annum. To determine the monthly interest amount, it is calculated as 11% of 22,80,000, which equals 2,50,800 annually. This annual interest amount is then divided by 12 to obtain the monthly interest payment.

So, the monthly interest payment is 2,50,800 / 12 = 20,900.

The interest payment is incurred and paid to ICIC Bank in May; it will be recorded as an expense in the income statement. Consequently, the bank balance will decrease by the corresponding amount, representing the interest payment made on the loan.

Financial position at the end of May

As indicated in Tables 1 and 2, at the end of May, the financial position reflects a retained earnings loss of approximately 605,175, resulting in a net worth of 4,93,94,285. This indicates that if all assets were sold, they would generate a total of 4,93,94,285. After settling the outstanding liabilities, the remaining amount is 4,93,94,285. This remaining amount is distributed among three individuals based on their respective capital contributions.

Table 1 - Income Statement - May

Income Statement of TR STEEL from May 1 to May 30, 2020			
Revenue		Expenditure	
accured interest on govt investment	4,375	insurance premium	1,500
accured interest on liquid mutual fund	5,833	salary of directors	1,40,000
		stock manager salary	20,000
		accountant salary	20,000
		foreman salary	30,000
		shed manager salary	20,000
		watchman salary	8,000
		manual labor	32,000
		petty cash	4,260
		electricity bill	28,500
		Depreciation	
		decoiling machine	25,833
		shearing machine	9,792
		office equipment	4,167
		rent	50,000
		interest on loan	20,900
	10,208		4,14,952

Profit before tax	-4,04,743
Less: Tax	0
Profit after tax	-4,04,743
Less: Dividends	0
Retained earnings	-4,04,743

Table 2 - Balance Sheet - May

Balance Sheet of TR STEEL as on May 30, 2020			
Asset		Liabililties & Equity	
Decoiling machine	41,48,333	GS's equity holding 50 lakh shares @ 5 each	2,50,00,000
Shearing machine	14,80,417	Tanay's equity holding 25 lakh shares @ 5 each	1,25,00,000
office equipment	1,41,667	Rishi's equity holding 25 lakh shares @ 5 each	1,25,00,000
Investment in Govt securities @ 7%	15,00,000	Retained earnings	-6,05,715
7% liquid mutual fund	20,00,000		
		NET WORTH	4,93,94,285
(95-20) ton of CR steel@41000	30,75,000	loan from ICIC bank @ 11%	22,80,000
(45-25-12) ton HRPO @ 35000	2,80,000	Loan from GS for machinery	34,20,000
40 ton of HR @ 34250	13,70,000		
		advance from modern barrels	-
Bank	3,91,53,200		
cash	5,25,960		
Security deposit with JS steel	-		
Receivables from GS for job work	-		
receivable from dulite	-		
credit note from Tat steel	8,75,000		
Loan to Tanay	5,00,000		
unutilised insurance premium	34,500		
accured interest on investments	10,208		
advance rent paid	-		
	5,50,94,285		5,50,94,285