

Lecture 4 Notes

EXAM

Only make a journal entry when you have received or paid out. But keep in mind the concept of accrued liability. In this case you've recognized expenses which have not yet been paid. For instance, employees are owed wages, it is the end of month, pay day isn't until the next month. At the end of the month the owed wages for work which has already been performed is an entry under accrued liability.

Executory Contract: a contractual exchange of promises to perform in the future but neither party has yet performed. No entry in the accounting journal.

A placed order gets no entry until the goods are received. No journal entry on a purchase order.

REVENUE

We've been talking about revenue as we go along because it is an important topic. A lot of people these days are going to jail for either purposeful recording of revenue that hasn't been earned or some other unfortunate lapse in ethics that companies have come up with. Here's the situation.

Upon booking a Sale (prior to allowance account) we make the entries:

<u>Balance Sheet</u>		<u>Income Statement</u>	
Accounts Receivable	\$ 500,000	Sales	\$ 500,000

Tonight we will learn some very simple entries of Sales. What happens when we sell stuff? We know we debit accounts receivable and credit sales. Lets say we have a \$500,000 sale. But of this \$500,000 we know some percentage of these sales may not be collected. In fact, historically companies can estimate what that percentage will be. Let's say this company estimated that 2% of it's sales are not going to be collected over time. It has a choice, either it can wait until it can identify which 2% are not going to pay and directly write those off, when known, to the expense accounts or it can use what is know as the Allowance Method.

Allowance Method: says I'm going to estimate at the time that I book the sale that 2% are going to be bad debt and I'm going to make an allowance for that. And then when I know which 2% those are I'm going to write them off against this allowance.

Here's the situation. I have accounts receivable right now of \$500,000 on the balance sheet. On the income statement I have sales of \$500,000. If I know that 2% of this is not going to be collected then I am kind of deceiving my stock holder into thinking that all my sales are going to be collected. Therefore, the allowance method is brought into being which says that in the year

of sale you should make an allowance, a journal entry that debits bad debt expense and credits an allowance for uncollectible accounts. 2% of \$500,000 is \$10,000.

Now we add an Allowance Account for the portion we expect to be uncollectable.

Now, this	<u>Balance Sheet</u>		<u>Income Statement</u>	in
	Accounts Receivable	\$ 500,000	Sales	\$ 500,000
	Allowance for Uncoll Accts	<u>\$ (10,000)</u>	Bad Debt Expense	<u>\$ (10,000)</u>
	Accounts Receivable Net	<u>\$ 490,000</u>	Net Sales	<u>\$ 490,000</u>

period, we'll call it time zero, we are making an allowance for uncollectible accounts of \$10,000 and a bad debt expense of \$10,000 so that we are showing that our accounts receivable net is \$490,000. That's what we really expect to collect. And that you really earned \$490,000 on the income statement (not considering cost of goods sold).

Here we are achieving the **Principle of Conservatism** and the **Matching Principle**. Matching Principle says when I book the sale I should match in the same period all the related costs related to that sale as well.

Now the next period comes up, may be less than a year, it turns out that I collect \$300,000 in Sales. Will debit cash for \$300,000 and credit accounts receivable for \$300,00. Let's say that also one of my accounts totaling \$2000 went bankrupt and they owe a lot of people. Not realistic that we will recover that debt. At this point we've identified who in the accounts receivable is the bad debt. We have to take them out of accounts receivable, so we will credit accounts receivable for \$2000. And we are going to offset it against the allowance account, we will debit the allowance for uncollectible accounts for \$2000.

<u>Balance Sheet</u>		<u>Time 0</u>		<u>Time 1</u>		<u>End Period</u>
			<u>A</u>	<u>B</u>		
Cash			\$ 300			\$ 300
Acct Rec	\$ 500		\$ (300)	\$ (2)		\$ 198
Allow for U/A	<u>\$ (10)</u>			\$ 2		<u>\$ (8)</u>
Acct Rec Net	<u>\$ 490</u>					<u>\$ 490</u>

← Matching →

Every time you have sales you make an allowance entry. Do it monthly basically. As we've seen this adjustment is made on sales on account but the same applies to sales paid for by check. Should have an allowance account for checks that bounce! (Cash payments are obviously sound).

(Credit and Collection departments evaluate a customers credit worthiness and try to avoid these types of bad debt.)

People play games with this type of account. For example, let's say that I decide it should be 1%, then I can take the other 1% and credit back to income statement expenses which will increase my income. This is illegal if not a legitimate basis for making this assumption. There are circumstances where it would be legitimate to make this adjustment. Consider the pension reserves, that's big bucks. The actuarial assumptions on the rate of return on invested assets can

make a huge difference on the amount of those reserves and that can have a very significant impact on profitability. All they have to do is say you know I think the rate of return on invested assets is going to go up by 2% based on historical trends. Therefore I don't have to provide more money into the fund. That means I don't have to accrue as large of pension expenses as I might otherwise have had to. That BIG! Same is true for warranty expenses. Can hide a little income during a good time in a warranty account. Debit Expense and Credit the warranty account for future warranty expenses. And then in bad times can claim that the company has not been experiencing a lot of warranty claims, how bout we take that allowance back into income, debit the allowance account and credit expenses, and that will boost income.

LONG TERM SALES ACCOUNTING

Long term sales accounting really relates to sales that are going to take more than one period to complete. Ex, constructing a building.

Assume that we have the following situation. We have on this contract cash receipts. And we know that we are not going to record cash receipts and cash disbursements because that is not GAAP. But that is how the money is rolling in and out. And on this basis we will have to make some accounting decisions. It's a 4 year contract with the payment disbursements described below:

4 Year Contract		
Yr	Cash Receipts	Cash Disbursements
1	40	15
2	80	70
3	120	100
4	60	55
	<u>300</u>	<u>240</u>

The cash disbursements reflect the project costs. The difference between cash disbursements and cash receipts is the PROFIT, in this case \$60 million over 4 years.

The question is how do we record this in the accounting system. When do we record revenue? And when do we record expenses? Well we know that the revenue has to be **EARNED** and

REALIZABLE. Say we are assured it is realizable but we have to EARN it in order to record it. When did we earn it? How do we determine this?

There are 4 methods companies use to make this determination.

In fact, companies can use one method for tax purposes and another method for book purposes. Ex, with the IRS' permission you could use the completed contract method for tax purposes and the percentage of completion method for book purposes. Then when you report your financial statements you can show a profit in every year but the tax returns will not show any profit until the final year. Thought we will learn how to account for this difference in another module.

1) COMPLETED CONTRACT METHOD

Says that we recognize the revenue only when the project is completed. Very Simple.

Complete Contract Method

<u>Yr</u>	<u>Revenue</u>	<u>Expense</u>	<u>Profit</u>
1	0	0	0
2	0	0	0
3	0	0	0
4	<u>300</u>	<u>240</u>	<u>60</u>

But what about all the cash coming in and going out? Where do we log that? We will debit cash when it comes in and will credit an account called Advances Received On Uncompleted Contracts. Then the cash disbursements are going to go out. And we will credit cash. But the debit is going to go to Cost Expended on Uncompleted Contracts. All that cash is going to be on the balance sheet and the only thing that will be recorded on the income statement is actually the revenue, expense, and profit that will show up in the final year when the contract is completed. Needless to say not too many companies opt to do this.

2) PERCENTAGE OF COMPLETION METHOD

As the contract goes along you measure the percent of completion that you attained. That's how much revenue and expense you recognize. How do we measure? **Principal of Objectivity** is important here. This says we must have a measure that is undeniable, that we can compute the percent of the contract we have completed. To do this we use **expenditures**. We say we are going to accept as fact whatever they spent. We know we were going to spend \$240 million to complete the contract so if we spent \$15 million of the \$240 million that represents 6.25% completion of the project.

The idea here is that the percentages are a projection of expected spending on the contract. The Expense column is your spending plan.

IMPORTANT TO USE THIS PROCEDURE TO AVOID ERROR

- 1) First put in Disbursements (Expense)
- 2) Next take the total value of contract (\$300 million in this case) multiplied by the percentages to find the recognizable revenue for the year.

Percent Complete			
<u>Yr</u>	<u>Expenses</u>	<u>Yearly Percentage</u>	<u>Recognized Revenue</u>
1	\$ 15	6.25%	\$ 18.75
2	\$ 70	29.17%	\$ 87.50
3	\$ 100	41.67%	\$ 125.00
4	\$ 55	22.92%	\$ 68.75
	<u>\$ 240</u>	<u>100.00%</u>	<u>\$ 300.00</u>
Total Contract Value (millions)			\$ 300

3) INSTALLMENT METHOD (without interest computation)

This method is used for the sale of a large asset that you are being paid for on an installment basis. In this method we first determine what the gross profit percentage is. We know that the gross profit percentage is equal to the profit over the revenue.

$$\text{GROSS PROFIT PERCENT} = \frac{\text{PROFIT}}{\text{REVENUE}} = \frac{60}{300} = 20.0\%$$

This says that every dollar of revenue we receive represents 20% profit.

PROCEDURE

- 1) Drop in the revenue stream based on the cash receipts.
- 2) Multiply the GROSS PROFIT PERCENT by the revenue to solve for profit.
- 3) List the remainder as Expense.

$$\text{GROSS PROFIT PERCENT} = \frac{\text{PROFIT}}{\text{REVENUE}} = \frac{60}{300} = 20.0\%$$

Installment Method

Yr	Revenue	Profit	Expense
1	\$ 40	\$ 8	\$ 32.00
2	\$ 80	\$ 16	\$ 64.00
3	\$ 120	\$ 24	\$ 96.00
4	\$ 60	\$ 12	\$ 48.00
	<u>\$ 300</u>	<u>\$ 60</u>	<u>\$ 240.00</u>

We are not computing interest on the installment method.

4) COST RECOVERY FIRST METHOD

This method is used for the sale of a large asset that you are being paid for on an installment basis.

Says that before you can realize a profit you must first recover all your costs.

Example, say we sell someone a large asset for which our cost (book value) for the large asset was \$240 million (what we paid, the value we had in our books). We sell it on an installment basis. They send us the first \$40 million. We are really only recovering a part of our cost. We really haven't made any profit yet. They send the next 80 but you've still only recovered \$120 million and have still not made a profit. The next payment is \$120 million but this only covers the costs, still no profit. Now the final \$60 million payment is all profit.

- 1) Drop in Revenue stream based on cash receipts.
- 2) We know the total costs we must recover based on total value of

Cost Recovery First Method

Yr	Revenue	Recovered Expense	Profit
1	\$ 40	\$ 40	\$ -
2	\$ 80	\$ 80	\$ -
3	\$ 120	\$ 120	\$ -
4	\$ 60	\$ -	\$ 60.00
	<u>\$ 300</u>	<u>\$ 240</u>	<u>\$ 60.00</u>

Homework

Ch 6, pb 33, pg 359

GE contracted for construction. They tell us the contract price and how it will be paid out. Also tell us how GE is going to incur their disbursements (expenditures) in constructing the generator. So we have the first 2 columns. Calc rev exp and net income for years 2, 3, and 4 under each of the 4 methods.

Ch 6, pb 13, pg 351

Only do YEARS 6, 7, and 8

Allowance method problem. Make a journal entry for each year. Each year will have a journal entry for 3 items. The 3 items are the sale on account, the allowance on those sales, and the total write off for that given year. The total write off might be from the pool of receivables in each one of the three years, but you'll write it off (see the columns that say 6, 7, and 8?) you'll see the total amount that you should write off. 1200, 7000, 9700 for each of those 3 years. The total amount to write off is the SUM (shown) in each year.