

In order for a sale to be entered in the accounting journal it has to meet two criteria. Must be EARNED and REALIZABLE.

**Earned** means they preformed the job, there performance is substantially complete. **Realiza ble** means they have the money or there is a reasonable chance they will be paid (customer has good credit record).

Principle of Conservatism: book losses when they are known and can be reasonably estimate I. Do NOT book gains UNTIL they are CERTAIN and there is a reasonable chance they can be collected (meaning customer has good history of payment and a good credit rating). Be conservative in your practices of booking gains and losses. Before booking a gain it should not only be certain but EARNED and REASONABLY COLLECTABLE.

Be careful on multiple choice. Know theory and terminology.

Will have to make an interest adjustment to a balance sheet entry as in HW 2 item 3-1).

A SALE ALWAYS has TWO DISTINCT entries. 1<sup>st</sup> involving Cash and Accounts Receivable. 2<sup>nd</sup> involving Cost of Goods Sold and Inventory. Example:

(3) During February: Sold merchandise costing Ps162,400 to various customers for Ps62,900 cash and Ps194,600 on account.

| <u>3-03A</u>                       | DR                      | <u>CR</u> |
|------------------------------------|-------------------------|-----------|
| Cash                               | \$ 62,900               |           |
| Acct Rec                           | \$ 194,600              | \$257,500 |
| <u>3-03B</u><br>Cost of Goods Sold | <u>DR</u><br>\$ 162,400 | <u>CR</u> |
| Inventory                          |                         | \$162,400 |

Note that the second entry reflects the cost of the goods (cost the selling company incurred). The theory behind this is that of DISBURSMENT which says money goes out due to cost. But COST can be classified as ASSET or EXPENSE depending on weather or not there is future benefit (asset) to that cost or weather the future benefit has been used (expense).





The exam will have an Accrual Liabilities account "EXPENSES ACCUMULATED BUT NOT PAID". This is a liability which is paid in the month the debt is incurred.



Income Statement is the measure of Operating Performance. In this way a company can measure if it has been profitable or not. This is only valid if the company uses Accrual Basis Accounting.

# EXAM

To **AMORTIZE** is to recognize as an expense.

With Tanagible Equipment, when we write it off over a period of time, that is called **Depreciation**. With Intangible items like patents, goodwill, development costs, copywrites, the writing off of these things over time is called **Amortization**.

In the extraction industries, such as coal and oil, the writing off of those assets over time is called **Depletion Expense**.



Will have to calculate Additional Paid In Capital (APIC), the amount over par value.

# EXAM

**Cash – To – Cash Cycle** otherwise known as **Operating Cycle** Defined and differs from company to company.



60 days between time customers pay and the company receives cash back **LECTURE 3 NOTES** 

## **CASH FLOW**

Two ways to analysis, Direct and Indirect.

**Direct Method** uses T-Accounts and and tries to analysis the various elements of cash flow in order to find out directly how much cash came from the various activities. There is a Cash Flow FASB release, of the top 500 companies in the US, only a very small percentage use the Direct Method. Most companies use the Indirect Method which is what we will learn.

**Indirect Method** simply looks at the balance sheet, takes changes in the balance sheet, and then places them directly on the cash flow statement.

Look at the different asset, liability, and equity accounts and take the differences between year 1 and year 2 (years under consideration) from comparative balance sheet.



## **INCREASES** ARE BRACKETED IN ASSETS **DECREASES** ARE BRACKETED IN LIABILITIES

(see below)

#### PROBLEM 4.5 FOR SELF-STUDY

**Preparing a statement of cash flows.** Exhibit 4.14 presents a comparative balance beet for Gordon Corporation as of December 31, Year 1 and Year 2. The following information pertains to Gordon Corporation for Year 2:

- L Net income was \$200,000.
- 2 Dividends declared and paid were \$120,000.
- 3. Depreciation expense totaled \$80,000.
- The firm sold buildings and equipment, which originally cost \$55,000 and had accumulated depreciation of \$40,000, for \$10,000.
- . Prepare a T-account work sheet for the preparation of a statement of cash flows.
- > Prepare a formal statement of cash flows.

| EXHIBIT 4.14 GORDON CORPORATION<br>Comparative Balance Sheet December 31, Year 1 and Year 2<br>(all dollar amounts in thousands) (Problem 4.5 for Self-Study) | December 31                             |            |         |
|---|---|------------|---------|
|   | Year 1                                  | Year 2     |         |
| ASSETS  |   | 1.00       |         |
| Current Assets  |   | 1920 mage  | -       |
| Cash  | *************************************** | s 70       | \$ 40   |
| Accounts Receivable   |   | 320        | 420     |
| Merchandise Invento   | ries                                    | 360        | 470     |
| Prepayments   | *************************************** | 50         |         |
| Total Current Asse  | fts                                     | \$ 800     | \$1,000 |
| Property, Plant, and  | Equipment                               |            |         |
| Land  | ****                                    | \$ 200     | \$ 250  |
| Buildings and Equipr  | nent (net of accumulated                |            |         |
| depreciation of \$8   | 000 and \$840)                          | 1,000      | 1,150   |
| Total Property, Pla   | nt, and Equipment                       | \$1,200    | \$1,400 |
| Total Assets  |   | \$2,000    | \$2,400 |
| LIABILITIES AND   | SHAREHOLDERS' EQUITY                    |            |         |
| Current Liabilities   |   |            |         |
| Accounts Payable  |   | \$ 320     | \$ 440  |
| Income Taxes Payabl   | e                                       | 60         | 80      |
| Other Current Liabilit  | 185                                     |            | 360     |
| Total Current Liab  | lities                                  | \$ 550     | \$ 880  |
| Noncurrent Liabilitie   | s                                       |            |         |
| Bonds Payable   |   | 250        | 200     |
| Total Liabilities   |   | \$ 800     | \$1,080 |
| Shareholders' Equity  |   | Visionales | 2       |
| Common Stock  | *************************************** | \$ 500     | \$ 540  |
| Retained Earnings   | *************************************** |            |         |
| Total Shareholden   | s' Equity                               | \$1,200    | \$1,320 |
| Total Liabilities an  | d Shareholders' Equity                  | \$2,000    | \$2,400 |



The reason we do this is because changes in the <u>balance sheet</u> have an impact on the <u>cash</u> <u>flow</u> that is reported in the <u>income statement</u>. We know that <u>whenever we make an accrual</u> <u>entry it effects both the income statement and the balance sheet</u>. Example:

If we were **accruing salaries** we would **debit expense** (which will affect the income statement) and we will **credit liabilities** (which will affect the balance sheet).

But that means on the income statement we are reporting that we had an expense and on the balance sheet we are reporting that we have not paid this expense yet.

That's why we need the balance sheet to adjust the things on the income statement to bring it back to cash basis.

If we see in the assets that there was in increase that means we bought something. If our inventory went up we bought something and that means we used cash. So it was a NEGATIVE CASH FLOW.

If we show accounts receivable going up that means we haven't received that money, that's a NEGATIVE on CASH FLOW. If our PP&E went up it means we used money to buy equipment, that's a negative impact on cash flow.

The sum of all of the other things adds to CASH. (will see more later)

If our Land went DOWN that means we sold some land which is a POSITIVE effect on CASH. Land going UP means we bought some land which has had a NEGATIVE effect on CASH.

(adding back will negate deduction)

In Liabilities the opposite is true. Example, if Accounts Payable goes up that means we bought something but have not paid for it. That's a POSITIVE on our cash flow.

If our Bonds Payable goes down that means we paid it which has a NEGATIVE effect on cash.

If common stock goes up that means we sold some common stock, got cash for it, which had a Positive effect on cash.

Income Taxes payable, we owe but haven't paid, that has a positive effect on the balance of cash.



What statement shows the operating performance of the company: INCOME STATEMENT

What is all this telling us?

The cash flow statement divided up into 3 parts:

- 1) Cash Flow from Operating Activities
- 2) Cash Flow from Financing Activities
- 3) Cash Flow from Investing Activities (most difficult)

First thing we do is make sure our differences balance or else cash flow won't balance.

Second thing is, we have to know that the bottom line on the cash flow statements is the Net Change in Cash for the period.

Third thing to know is that the bottom number on the cash flow statement is the same as the top number on the balance sheet change except it is of opposite sign. In this sense we already know what the answer is going to be.

### Now create a **Cash Flow Statement** beginning with **Cash Flow from Operating Activities**

| 1 Cash Flow from Operating Activities   |             |
|---|-------------|
| Net Income                              | \$<br>200   |
| Add/Subtract Back Non-Cash Items        |             |
| Non-Cash Items Depreciation Exp.        | \$<br>80    |
| Loss on Sale of Equipment               | \$<br>5     |
| delta Accounts Recevable                | \$<br>(100) |
| delta Investments                       | \$<br>(110) |
| delta Prepayments                       | \$<br>(20)  |
| delta Acctounts Payable                 | \$<br>120   |
| delta Income Tax Payable                | \$<br>20    |
| delta Other Current                     | \$<br>190   |
| Total Cash Flow from Operating Activity | \$<br>385   |

#### 2 Cash Flow from Financial Activities

| Principle Paid, Bond Payable      | \$<br>(50)  |
|-----------------------------------|-------------|
| Common Stock                      | \$<br>40    |
| Dividends Declared & Paid         | \$<br>(120) |
| Total Cash Flow from Finance Act. | \$<br>(130) |

#### 3 Cash Flow from Investing Activities

| Purchase of New Equipment         | \$<br>(245) |
|-----------------------------------|-------------|
| Proceeds on Sale of Equipment     | \$<br>10    |
| Purchase of Land                  | \$<br>(50)  |
| Cash Flow from Investing Activity | \$<br>(285) |
|                                   |             |
| Net Change in Cash *              | \$<br>(30)  |

\* This is the same value with opposite sign as the Balance Sheet Cash From Assets.

First thing is net income. Here we want to show what are the operating activities and the cash which was generated by these activities. Net **Income** is the measure of **Operating Performance**. How do we determine net income? Either they have to give us a net income statement, tell us the net income value, or we figure it out. In this example it is given in the problem statement. But if your looking for it or want to solve for it we know the net income impacts the retained earnings. In this case, the positive value causes retained earnings to go up. But we see that retained earnings went up only by 80. Where is the difference? **DIVIDENDS**! All current assets and current liabilities

#### **Retained Earnings**

| Opening Balance                  | \$<br>-     |
|----------------------------------|-------------|
| Add Net Income                   | \$<br>200   |
| Subtract Dividends Dec (DEDUCED) | \$<br>(120) |
| End Balance of Retained Earnings | \$<br>80    |
| are in the                       |             |

**OPERATIONS** section. All fixed assets or long term assets (all non-current

assets) show up in the INVESTING section. All long term liabilities and all equity shows up in the FINANCE section.

Once we get net income we must look at it carefully, because net income has a lot of non-cash stuff in it. Example, depreciation expense. They tell us in bullet number 3 that depreciation expense totaled \$80,000. But above we see accumulated depreciation at only \$40,000. We will see why in a moment.

## **EXAM** SUGGESTION: Always use the depreciation expense in the income statement in order to adjust net income.

Want to add back non-cash charges such as depreciation expense because it was deducted from net income in arriving at net income and now we want to negate that by adding it back. The number that negates that value is \$80,000.

## **EXAM** memorize these two formats.

In all of the cash flow statements this and one other are the most difficult. This procedure is the most clear way to understand. Reason is because in these cash flow problems they give us bits and pieces of information. If we know what info is required we can take that and solve for the missing items. Know the format, put in the numbers which are given, solve for the unknowns.

In bullet #4 the firm sold buildings and equipment which originally cost \$55,000 and had accumulated depreciation of \$40,000 for \$10,000. (Sold the B=E for \$10,000). We are talking about the gain or loss on sale of equipment. There are proceeds from the sale then less the net book value (NBV) which is the original cost less accumulated depreciation giving the Net Book Value. The difference between the proceeds and the cost that remained on the book value for that item gives the gain or loss on sale.

| Gain or Loss on Sale of Equipme      | ent |      |            |
|--------------------------------------|-----|------|------------|
| Proceeds (sale price)                |     |      | \$<br>10   |
| less Net Book Value                  |     |      |            |
| Original Cost                        | \$  | 55   |            |
| <ul> <li>Accumulated Cost</li> </ul> | \$  | (40) | <br>       |
| = Net Book Value                     | \$  | 15   | \$<br>(15) |
| Gain or Loss on Sale                 |     |      | \$<br>(5)  |

(proceeds, in blue, is used in Investing Activity)

A GAIN will show up on the income statement in the REVENUE section under Gain on Sale of Equipment.

A LOSS will show up on the income statement in the EXPENSE section under Loss on Sale of Equipment.

But this is a Non-Cash Charge. Also, this is the result of investing activities, not the result of operational activites. What we must do is add it back because it's a loss (if it had been a gain we would subtract it) they deducted it at arriving at net income so we want to remove that non-cash "hydred" (?) charge out of the income statement. They deducted it, we must add it back. If it were a gain we would have to subtract it out. It's a loss so we add it back in.

So, drop in Net Income then try to figure out if there are any non-cash items in the income statement (depreciation would always be one) and if there is a gain or loss make the appropriate addition or subtraction. (add it back if it's a loss, subtract it out if it's a gain).

### **Cash Flow from Financing Activities**

Liability, Long Term Liabilities, and Equity are financing activities. Bonds payable went down so that was a repayment, principle paid on bonds payable (outflow, negative). Common Stock went up. Dividend declared and paid is a financing activity (outflow, negative). This gives total cash flow from financing.

So far we have adjusted net income to remove the non-cash item(s) and then simply did changes in the current assets and liabilities. Then went to long term liability and equity, put down the changes in those things.

Now we go to the entries into the Investing account. MOST DIFFICULT.

## **Cash Flow from Investing Activities**

(This is the second sechedule to memorize. Do it this way and never ever have a problem.)

We are going to analysis the building and equipment account and its related accumulated depreciation account. Will look at the opening balance and add to it things that add and subtract things which subtract. We know what the opening and ending balances should be from above so we will plug in and solve for unknowns. We know that the opening and ending balance for equipment is \$1800 and \$1990. And with regard to accumulated depreciation the opening and closing balances are -\$800 and -\$840.

Now, what causes building and equipment to go up? New Purchases on equipment does! What causes that account to go down? Sales, the cost of equipment sold. What causes accumulated depreciation to go up (in the negative)? Depreciation Expense for the period related to time. What causes accumulated depreciation to go down? Sale of Assets does. When you sell assets you not only remove the asset from the books, you also have to remove the related accumulated depreciation (because you no longer have the asset on the books so you can't claim its depreciation).

What do we know? What information do they give us? Not a lot in this case. Looking for things we can plug in. We did sell some equipment so that can be put in. \$55,000 decrease in equipment. Accumulated depreciation which will decrease the negative, removing it out of there because we sold the equipment. Now the only other thing which would cause building and

equipment to change is the purchase. We know the cost of the equipment which was sold so we can solve for the cost of the equipment new.

1800-55=1745 → 245 (by Difference)

800-40=760, but we already knew the depreciation expense for the period was -80 (an increase in the negative).

| Building & Equipent Analysis                   | B + E        |       | Accum. Dep |       |
|--|--------------|-------|------------|-------|
| Opening Balance                                | \$           | 1,800 | \$         | (800) |
| Additions<br>New Purchases (derived)           | \$<br>3d) (a | 245   | ¢          | (80)  |
| Depreciation Expense (for the pend             | a) (g        | iven) | Э          | (80)  |
| Subtractions                                   | ¢            | (55)  |            |       |
| Cost of Equipment Sold                         | \$           | (55)  | ¢          | 40    |
| on Sale  | _            |       | φ          | 40    |
| End Balace                                     | \$           | 1,990 | \$         | (840) |
| (New Purchases, in blue, is used in Investing) |              |       |            |       |

Buying Equipment is a negative to Cash because you used cash to buy the equipment. It is negative in the Investing Activities. Proceeds are a positive to Cash, they increase Cash. Land, must account for it. Land went up so it's a purchase which is a negative to cash flow.

Now we READ the statement. This says that this company generated \$385,000 from its operations (in positive cash flow). It then used \$130,000 of that on financing activities, principally declaring and paying a dividend and also paying off some bonds while gaining funds from the floating of stock. In addition to that it used another \$285,000 on investing activities (new equip, land, selling old equip). In all between amount used in operations and amount gained from investing and financing activities, its cash balances went down by \$30,000.

Now can look at components of each area and say its cash flow gen from operating was positive but there were significant increases in their acct rec, inv, and prepayments which were offset by a lot of barrowing. The barrowing was through accounts payable, income taxes payable, and other current liabilities.

In the next class we will be looking at financial statements and we will want to know are they efficiently collecting their receivables, how many days or receivables are outstanding? How many days of supply are in inventory. How many days of payables are outstanding? We see the impact and want to be sure those things are being managed efficiently.

Homework Cash Flow Problem Ch 4, pb 31, page 234 and 235, b and c only. Do not be thrown by the credit debit thing. Move the accumulated depreciation to the asset section. Dividends declared does not belong on the income statement. Do not include it when solving for income statement. Only doing year 3.

Do the chapter 2 and 3 terminology. Do not use the definitions in the back of the book.