Revenue Recognition Principle

Revenue is recognized when
(1) it is realized or realizable
(2) and earned

Recognition is not the same as realization, although the two are sometimes used interchangeably in accounting literature and practice. Realization is the process of converting non-cash resources and rights into money and is most precisely used in accounting and financial reporting to refer to sales of assets for cash or claims to cash* (SFAC No. 3, par. 83). (text footnote No. 5 page 1001)

IN ENGLISH: Recognize=record it
Realize=Done (hopefully got the cash, but not necessarily)

If life were easy, that would be the end of it, but read the papers—revenue recognition is a major issue—that is why the SEC issued SAB 101 and why they are strictly enforcing it via the PCAOB, and why there have been so many restatements as a result of revenue recognition. Business practices make it complicated and we are going to talk about why and how to deal with it.

Problems of implementation can arise because of
1. Sales with buyback agreements,
2. Revenue recognition when right of return exists,
3. Trade loading and channel stuffing,
4. Tied to other services or product sales,
5. Other factors

Think about the transaction, ask yourself when was the revenue really earned (when did we do what it was we agreed to do and collection for this reasonably assured?). This logic will usually work. The SEC responded in SAB 101 & 104 and their response follows this logic:

"The staff believes that revenue generally is realized or realizable and earned when all of the following criteria are met:
- Persuasive evidence of an arrangement exists,
- Delivery has occurred or services have been performed,
- The seller's price to the buyer is fixed or determinable, and
- Collectibility is reasonably assured."

Illustration 18-1, pg. 908 of text
Sales with Buyback

If there is a sale (even if there is a transfer of title) and the seller agrees to buy-back the product for an amount equal to the cost of the inventory and related holding cost—NO SALE

But if the sellers buyback agreement is for less than the cost plus holding costs (which of course would be a “put” by the buyer), then it might need more careful consideration (i.e. an allowance, which will be discussed more fully later)

REMEMBER

IF YOU DO NOT RECORD THE REVENUE, DO NOT RECORD THE COST!

SALES WITH RIGHT OF RETURN

WHEN RIGHT OF RETURN EXISTS, 6 CRITERIA MUST BE MET (See p. 910 of text for full verbiage). In summary (I combine them)
- The price must be fixed and the buyer obligated to pay, regardless of how much they sell it for and seller is not required to help them sell it
- The buyer has risk of loss
- The buyer is not a “credit risk”
- The returns can be reasonably estimated

If all 6 are met, then recognize revenue, less any allowances for returns etc. (will discuss more fully later)

If NO to any, then no sale until the sooner of (1) cash collection or (2) all 6 criteria become met.

NOTE: These tie nicely to the SEC SAB 101/104 guidelines! If you satisfy these 6, then you satisfy SAB 101’s guidelines.

Revenue Recognition

XYZ sells 100 widgets for $100 to ABC on credit. There are no rights to return or buyback. Has the revenue been earned? Should it be recognized?

YES, YES

Say that the terms grant ABC the right to return the widgets if they do not sell them?

Therefore, what questions do you have about the widgets and ABC now?
- Can the returns be reasonably estimated?
- Is ABC a credit-worthy company?
- If both are yes, then the sale should be recorded. If either is no, then it should not yet be recorded, until the cash is received or the criteria are met—whichever comes first.
Scooby Doo Music sold CDs to retailers for $800,000 and granted the right to return. The retailers are of high credit-standing, they have received the risk of loss upon receipt of the goods (which was FOB receiving) and there is no further obligation by Scooby Doo Music. During the remaining period of the year, retailers returned CDs to Scooby Doo and were granted credit of $78,000. Past experience indicated that the normal return rate is 15%. Prepare Scooby Doo’s entries to record (a) the initial sale and (b) the $78,000 of returns. Scooby Doo’s cost of the sold CDs is $500,000.

(a) Initial entry:
- 
  Accounts receivable $800,000
  Sales $800,000
  Sales returns allow. $120,000
  A/R allowance $120,000
  COS $425,000
  Inventory $425,000

(b) Returns received
- 
  A/R allowance $78,000
  Accounts receivable $78,000

NOTE: NO P&L IMPACT - HIT TAKEN IN (a) Initial Entry.

NOTE: Need to keep track of returns. If only $78k is all that is ever returned, then we would need to undo the sales reserves and also record the COS (COMPUTERS HELP US WITH THIS):
- 
  A/R Allow $42,000
  Sales returns Allow $42,000
  COS $26,250
  Inventory $26,250

Sales Examples

- Magazine subscription
  - Receive 12 months in advance, recognize as provided, therefore recognize 1/12 of the revenue per month.
- Gym membership
  - Monthly fee works out okay (provide as pay) but what about the up-front membership fee?
    - Record as revenue over the membership period, if lifetime fee, record over your historical experience (3 years in practice)
- Royalties
  - Receive as earned

Entry-deferred revenue!

Receive $12 for magazine subscription on January 1, 2003. Will send a magazine on the 15th of every month until expiration with the December 15th mailing. What is the initial entry?
- 
  Cash $12
  Deferred revenue $12 ---- NOTE no revenue recorded b/c we have not yet done anything to earn it

What entry is to be recorded on the 15th of every month?
- 
  Deferred revenue $1
  Revenue $1 ---- NOTE every month we record revenue commensurate with providing the goods.

On December 16, 2003, how much deferred revenue remains and how much revenue has been recorded?
- 
  $0 deferred revenue and $12 of revenue has been recorded.

This hopefully makes sense. On December 16, 2003, we provided everything we said we would and accordingly have recognized all of the revenue and have none deferred.
Revenue Recognition Before Delivery

Under certain circumstances revenue is recognized prior to completion and delivery.

Discussion Question: What is the rationale for using the percentage-of-completion accounting method for long-term construction contracts?

Long-term Construction Contracts

The profession requires that the percentage-of-completion method MUST be used when estimates of progress toward completion, revenues, and costs are reasonably dependable and three specific conditions exist. They are:

1. The buyer can be expected to satisfy all obligations under the contract.
2. The contract clearly specifies the enforceable rights regarding goods or services to be provided and received by the parties, the consideration to be exchanged, and the manner and terms of settlement.
3. The contractor (seller) can be expected to perform the contractual obligation.

NOTE: In practice - ALWAYS

Long-term Construction Contracts

Discussion Question: When does the profession require the percentage-of-completion method to be used?

Discussion Question: When should the completed-contract method be used?

Subliminal slide

Cost drives revenue Cost drives revenue
Cost drives revenue Cost drives revenue
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Cost drives revenue Cost drives revenue
Percentage of Completion, what is it?

Sometimes you agree to do something (generally build something) and it is going to take a really long time to finish it. So SOP 81-1 came out to provide us the ability to provide revenue recognition along the way. This makes sense when you think about it b/c even though you may not have finished building a 40-story building, don’t you think the users of the financial statements might be interested in seeing what things are looking like when you get 25 stories done?

Percentage completion provides a very good matching of revenue to expense as it starts with costs incurred in determining the amount of revenue to record—called the cost-to-cost method.

COSTS DRIVE REVENUE!

Preventive Question

What impact do billings have on revenue recognition under the percentage of completion method?

NONE—COSTS DRIVE REVENUE

We’ll come back to that concept.

Here is how it works

The contractor must always maintain an estimate of what the contract value will be as well as the total costs to them in completing the contract. You will see why it is important in the following equation:

\[ \text{% Complete} = \frac{\text{costs incurred}}{\text{estimated total costs}} \]

\[ \text{Revenue} = \text{% complete} \times \text{Contract Value} \]

\[ \text{Revenue} = \frac{\text{costs incurred}}{\text{estimated total costs}} \times \text{Contract Value} \]

SOME TERMINOLOGY TO SOUND EXPERIENCED:

EAC: estimate at completion (or total est. costs)

CITD: costs incurred to date

IT'S ALL RIGHT HERE... ALL OF IT!

<table>
<thead>
<tr>
<th>REPORTED</th>
<th>ACTUAL</th>
<th>ESTIMATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITD</td>
<td>Estimated costs at completion (EAC)</td>
<td>% Complete</td>
</tr>
<tr>
<td>Revenue</td>
<td>Estimated contract value (CV)</td>
<td></td>
</tr>
</tbody>
</table>

Revenue to date (RTD) = CITD + Estimated costs at completion (EAC) = Estimated contract value (CV)

NOTE: Each period is a cumulative computation... at any reporting period, the CITD/Revenue to date should be the same as the total estimate at completion (EAC/CV)
**Costs drive revenue!**

From our equation:

\[
\text{rev} = \frac{\text{costs incurred/est. total costs}}{\text{contract value}} \times \text{contract value}
\]

We can see that billings have nothing to do with revenue recognition. So if we credit revenue, what do we debit??---Work In Progress (WIP), a balance sheet account.

If WIP is a debit, it is an asset called "unbilled revenue" (proper long name is costs incurred plus estimated gross profit in excess of billings on uncompleted contracts). Think of it as an account receivable that we have not yet sent a bill to the customer for.

If we start billing more than we have recognized, the "unbilled revenue" is negative and we call it a LIABILITY "pre-billed revenue" (again a long name is billings in excess of costs incurred and estimated gross profit on uncompleted contracts).

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**Mechanics**

- Costs are "recorded" as they are incurred.
- Revenue is recorded based on the equation.
- The other side to the revenue entry is "unbilled".
- Billings to the customer reduce the "unbilled".
- Collections from customer are applied against the billed receivables.
- This means that at every point in time, the revenue recognized relative to the costs is ALWAYS at the same profit margin as the estimates at completion—if we project the contract to be $1,100,000 and to cost $1,000,000, then the markup is 10%. So if there are costs incurred, you apply the equation and I guarantee you that it will result in a 10% markup on costs. So if we have incurred $90,000 of costs, then we should report $99,000 of revenue.
- Losses are recorded IMMEDIATELY.

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**Mechanics continued**

Since costs drive revenue, each revenue begins life as an unbilled revenue. Then it gets billed to the customer and it switches to a billed revenue. Then the customer pays it and it becomes cash—Voila!

Think of it this way, at any point in time:

Revenue = unbilled + billed A/R + cash collected

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**FINALLY, AN EXAMPLE!**

Contractor signs a contract for $1,100,000 to build an office for Buyer. Contractor believes that the contract will cost them $1,000,000 to complete.

Contractor incurs $100,000 of costs (the GP has recorded them as an expense already). What is the entry?

Unbilled $110,000
Revenue $110,000

LIKE I PROMISED, COSTS DRIVE REVENUE!

Contractor bills the customer $100,000. Entry?

Accts. Rec. $100,000
Unbilled $100,000

Contractor collects $100,000 from Customer. Entry?

Cash $100,000
Accts. rem. $100,000

THAT IS THE LIFECYCLE OF ONE MONTH. CHECK IF WHAT WE SAID HOLDS TRUE:

- WE RECORDED $100,000 OF COSTS AND $110,000 OF REVENUE. THEREFORE WE ARE AT A 10% MARKUP ON COSTS. JUST LIKE OUR TOTAL ESTIMATE!
- AT THE END OF THE MONTH, UNBILLED IS $10,000, BILLED A/R IS $0, AND CASH COLLECTED IS $100,000—WHICH LOOKS LIKE ADDING THEM TOGETHER GETS US TO $110,000, THE SAME AS THE REVENUE RECORDED.
Example continued, more costs incurred

The next month, the contractor incurs $200,000 of costs (let’s not forget that revenue of $110,000 was already recorded as well as $100,000 of costs)).

Entry:

Unbilled $220,000
Revenue $220,000

($330,000 total revenue computed as the $300,000 CITD/1,100,000 EAC $1,100,000 contract value. We already recorded revenue of $110,000 on previous slide, therefore $220,000 recorded above to get to the $330,000)

Contractor bills the customer $225,000. Entry?

A/R $225,000
Unbilled $225,000

Contractor collects $225,000. Entry?

Cash $225,000
A/R $225,000

Example continued- change in estimate

Now the Contractor determines that the initial cost estimate was too big. They change their total estimated costs from $1,000,000 to $900,000. They incur $200,000 of costs this month (that makes $500,000 total costs so far and they previously recognized $330,000 in aggregate revenue). What is the entry?

Unbilled $281,111
Revenue $281,111

 LETS SEE ABOUT THAT PROFIT MARGIN:

As of now, we have $500,000 of costs and $611,111 of revenue recorded, equals a 22.2% markup on costs
Our estimate at completion is still $1.1 million of revenues, but our estimate of costs are $900,000; that equals a 22.2% markup on costs WOW that is pretty cool!

By the way- You may be tempted to take whatever the current period costs are and use that to determine the current period revenue—DON’T! If there is a change in estimate along the way, this won’t work, you should always compute the aggregate revenue and then adjust to that number to make sure your are “truing up” recognition based on changing estimates.

Example continued- oops it’s a loss!

We realize that the estimated costs should have been $1,150,000, consequently there is a $50,000 estimated loss. After firing the project manager, we remember that we need to record all losses NOW!

Revenues we recorded so far $611,111
Costs we recorded so far $500,000

So even though the loss is only $50k, in order to get there, we need to wipe-out $111,111 of previously reported profit as well. Combining the two gets us there:

Revenue $161,111
Unbilled $161,111

NOTE that at this point, our unbilled might be negative. If it ever goes negative, it becomes a liability and called pre-billed (or billings in excess of costs and gross profit on uncompleted contracts)

Text Vs. What we just did

What was just presented works and is what it looks like out there in the world, BUT it differs from the presentation in the text. I elected to teach this in a way that I believe is more understandable.

Starting on page 914 of Chapter 18, is an illustration. The webpage has an excel document that solves this illustration in the same way that we discussed above- allowing you to compare/ contrast and decide which works best for you---THEY PRODUCE THE SAME RESULTS EITHER WAY.
Mill Construction Co. uses the percentage-of-completion method of accounting. During 1989, Mill contracted to build an apartment complex for Drew for $20,000,000. Mill estimated that total costs would amount to $16,000,000 over the period of construction. In connection with this contract, Mill incurred $2,000,000 of construction costs during 1989. Mill billed and collected $3,000,000 from Drew in 1989. What amount should Mill recognize as gross profit for 1989?

a. $250,000  
b. $375,000  
c. $500,000  
d. $600,000

Solution:

\[
\begin{align*}
\text{Cost incurred to date} & = 2,000,000 \\
\text{Total estimated cost} & = 16,000,000 \\
\text{Percent complete} & = 12.5\% \\
\text{Contract price} & = 20,000,000 \\
\text{Estimated cost} & = 16,000,000 \\
\text{Total gross profit} & = 4,000,000 \\
\text{Percent complete} & = 12.5\% \\
\text{Gross profit to recognize} & = 500,000
\end{align*}
\]

Additional Revenue Recognition Methods

**Installment Sales Method:** Revenue & Expense not recorded, gross profit deferred and recognized as cash is collected. The "Deferred gross profit" is a liability and it becomes INCOME based on the % of the associated cash is collected each period.

**Cost Recovery Method:** Cash collected is treated as a reduction to the cost of the item sold. Once the cash collected reduces the cost of the item sold to zero, then income is recognized for all subsequent cash payments received.

Installment sale example (page 025 of text)

Sell goods costing $150,000 for $200,000 but recognize under the installment method:

- A/R installment: 200,000
- Inventory: 150,000
- Deferred gross profit: 50,000

Collect $60,000 (means that 60/200 or 30% collected, therefore record 30% of the deferred gross profit as "Realized Gross profit" = $15,000):

- Cash: 60,000
- A/R: 60,000
- Deferred gross profit: 15,000
- Realized gross profit: 15,000
Cost recovery example

Pay $60,000 for a "sub-prime" note receivable with a face value of $100,000 which pays interest at 10%. Due to highly uncertain nature of repayment, use cost recovery method:

RECORD PURCHASE:
Note receivable 60,000 (could use discount)
Cash 60,000

COST RECOVERY - Receive $10,000 interest payment:
Cash 10,000
Note receivable 10,000
(NOTE: NO income - we "recover" the cost first. Once the balance of the note falls to zero, then all future cash is income)

AFTER RECEIVING ALL THE 60,000 BACK, we collect an additional $10,000:
Cash 10,000
Revenue from discounted notes 10,000