

# Notes

Chapter 5

## Accounting 351

Spring 2011

California State University, Northridge

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### Revenue Recognition

#### Concepts Statement 5

**Recognition** is the process of formally recording and reporting an item (an action).

- ✓ Element (Concepts Statement 6)
- ✓ Measurable
- ✓ Relevant and Reliable

Revenue is **recognized** when

- (1) **realized** or **realizable** (Spiceland describes this as "reasonable certainty as to the collectibility")
- (2) **earned** (FASB - When **substantial** completion of what must be done to be entitled to the benefits generated by the revenue.)

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Revenue is **realized** when products (goods or services), merchandise, or other assets are exchanged for cash or claims to cash (receivables)

Revenue is **realizable** when assets received or held are **readily convertible** into **known** amounts of cash or claims to cash.

- Fungible units (interchangeable)
- Public market

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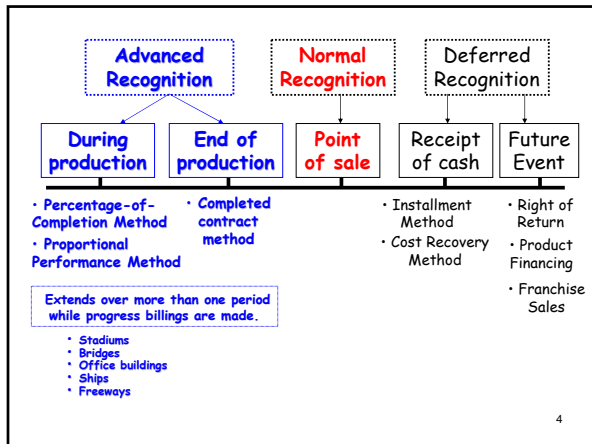
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**SEC Staff Accounting Bulletin (SAB) No. 104**  
**FASB ASC 605-10-S99-1**

SAB 104 requires transactions to meet the following criteria before revenue is recognized (ASC 605-10-S25-1):

- ✓ **Persuasive evidence of an arrangement exists.**
- ✓ **Delivery has occurred or services have been rendered.**
- ✓ **The seller's price to the buyer is fixed or determinable.**
- ✓ **Collectibility is reasonably assured.**

SEC considers revenue is **realized** or **realizable** and **earned** if these criteria are met.

SAB 104 does not create new GAAP, but only interprets existing GAAP and addresses specific abuses. <sup>5</sup>

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**Side Agreements**

**Consignment vs. Sale**

- Liberal return policy
- Payment not due until sold
- Repurchase
- Interest free financing

**Channel Stuffing and Trade Loading**

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## Bill and Hold Arrangement

Must transfer legal and economic ownership.

- Inventory is ready to ship to customer.
- Inventory must be segregated and can't be used to fill other orders.
- In writing, buyer has requested B & H.

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## Multiple Deliverables

EITF 00-21 (ASC 605-25-25-5)

Is the component an integral part of entire package?

Example: Cell phone activation fee

- Would customer pay separately to be signed up without monthly services?
- Up-front fees must be a separate "unit of accounting".
- Component has value to customer on a standalone basis.

➤ Recognize on S/L basis over life of contract.

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## Revenue Recognition Before POS

Facts: Gertrude Alpha started Alpha Company by investing \$100. She purchased inventory with the \$100 and had credit sales of \$150. During the year, she collected \$60.

1. Cash	100	
Capital Stock		100
2. Inventory	100	
Cash		100

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3. Accounts Receivable	150	}	Gross Profit =
Sales Revenue	150		
Cost of Goods Sold	100		
Inventory	100		
4. Cash	60		
Accounts Receivable	60		

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**Income Statement**

Revenue	150
Cost of goods sold	<u>(100)</u>
Gross profit	50

**Balance Sheet**

Assets		Stockholders' Equity	
Cash	60	Capital stock	100
Accounts receivable	<u>90</u>	Retained earnings	<u>50</u>
Total Assets	150	Total SE	150

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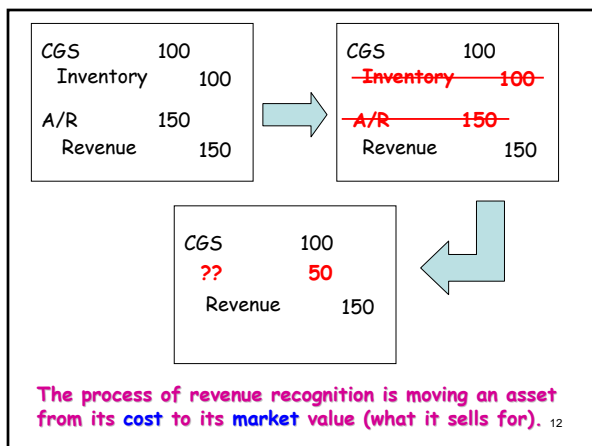
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1. Inventory	100	
Cash		100
2. Cost of Goods Sold	100	
Inventory (move from cost to market value)	50	
Revenue		150
3. Accounts Receivable	130	
Billings (contra account to Inventory)		130
4. Cash	60	
Accounts Receivable		60

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**By billing the customer, the company transfers its interest in the project from a physical asset (inventory) to a financial asset (accounts receivable).**

Inventory	100	} Inventory (market value)
Gross profit	50	
Billings	(130)	} Contra to Inventory
<b>NRV</b>	<b>20</b>	

**Net realizable value (NRV)** of an asset - The amount of cash (or equivalent) into which the asset is expected to be converted in the ordinary operations.

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**Income Statement**

Revenue	150
Cost of goods sold	(100)
Gross profit	50

**Balance Sheet**

<b>Assets</b>		<b>Stockholders' Equity</b>	
Cash	60	Capital stock	100
Accounts receivable	70	Retained earnings	50
<b>Inventory</b>	<b>150</b>		
<b>Less: Billings</b>	<b>(130)</b>	<b>20</b>	
Total Assets	150	Total SE	150

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1.	<del>Inventory</del> <b>Construction in Progress</b>	100	
	Cash		100
2.	<del>Cost of Goods Sold</del> <b>Cost of Construction</b>	100	
	<del>Inventory</del> <b>Construction in Progress</b>	50	
	Revenue		150
3.	Accounts Receivable	130	
	<del>Billings</del> <b>Billings on Contr Contract</b>		130
4.	Cash	60	
	Accounts Receivable		60

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<u>Income Statement</u>			
	Revenue		150
	<del>Cost of goods sold</del> <b>Cost of Construction</b>		<u>(100)</u>
	Gross profit		50
<u>Balance Sheet</u>			
Assets		Stockholders' Equity	
Cash	60	Capital stock	100
Accounts receivable	70	Retained earnings	50
<del>Inventory</del> <b>Construction in progress</b>	150		
Less: Billings	<u>(130)</u>		<u>20</u>
Total Assets	150	Total SE	150

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**Completed Contract Method**  
Income is recognized only upon completion of the contract. **IAS 11 - Cost Recovery Method** (recognizes costs as incurred and equal amount of revenue).

**Percentage of Completion Method**  
Income is recognized as work progresses on the contract. **Similar to IAS 11.**

**The percentage can be based on:**

- % of cost to date to total cost (cost-to-cost method).
- An activity measure to complete such as labor hours (efforts-expended method).
- An output measure such as stories in a building or miles of road construction (units of work performed method).

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**Percentage of Completion Method** (ASC 605-35-25)

The percentage of completion must be used when:

- ✓ Estimates of progress toward completion, revenues, and costs are reasonably dependable.
- ✓ The contract clearly specifies the enforceable rights, the consideration to be exchanged, and settlement.
- ✓ The buyer can be expected to perform the contractual obligations.
- ✓ The contractor can be expected to perform the contractual obligations.

Use the completed contract method if contracts are short-term, high degree of uncertainty in the contract, or the above conditions are not met.

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For the **completed contract method**, inventory (**construction in progress**) is carried at cost.

For the **percentage of completion method**, inventory (**construction in progress**) is carried at cost plus recognized gross profit.

**Facts:** Beta signed a construction contract to build a widget for Gamma. The project should take 3 years to complete. The contract price is \$900 and the estimated cost to complete the project is \$800.

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1. Estimate the total cost of the contract.

2. Find the % of completion =  $\frac{\text{Current Costs}}{\text{Total Estimated Costs}}$

3. Find the total Gross Profit = (Total Revenues - Total Costs)

4. Multiply the % each year of Gross Profit

5. Add this Gross Profit to inventory (Construction in Progress)

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**Percentage of Completion Method**

**Year 1 (current costs = \$320)**

1. <b>Compute gross profit of completed contract.</b>	Contract Price	\$900	
	Estimated total cost	<u>800</u>	
	Gross Profit	100	
2. <b>Compute % of completion.</b>	Total cost to date = 320		= 40%
	Estimated total cost = 800		
3. <b>Compute gross profit to date</b>	Gross Profit	100	
	% of Completion	40%	
	Gross Profit to date	40	
4. <b>Compute gross profit for current period</b>	Gross Profit to date	40	
	Previously recognized GP	0	
	Current year GP	40	
	Revenue recognized (40% x 900)	360	
	Cost of Construction (40% x 800)	<u>320</u>	
	Gross Profit	40	22

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**Year 1 Journal Entries**

1. Construction in Progress	320		} Both % of Completion and Completed Contract Methods
Cash		xx	
Other accounts (payables, etc.)		xx	
2. Accounts Receivable	200		} Both % of Completion and Completed Contract Methods
Billings on Constr Contract		200	
3. Cash	150		} Both % of Completion and Completed Contract Methods
Accounts Receivable		150	
4. Cost of Construction	320		
Construction in Progress	40	Gross Profit	
Revenue from LT Contracts	360		

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**Year 1**

**Income Statement**

Revenue from LT contracts	360
Cost of construction	<u>(320)</u>
Gross profit	40

**Balance Sheet**

Accounts receivable	50
Construction in progress	360
Less: Billings on CC	<u>(200)</u>
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**Year 2 (current costs = \$224)**

5. <b>Compute gross profit of completed contract.</b>	Contract Price	\$900	
	Estimated total cost	<u>800</u>	
	Gross Profit	100	
<hr/>			
	Cost to date = 544 ( 320 + 224 )		
6. <b>Compute % of completion.</b>	Total cost to date	= 544	= 68%
	Estimated total cost	= 800	
<hr/>			
7. <b>Compute gross profit to date</b>	Gross Profit	100	
	% of Completion	<u>68%</u>	
	Gross Profit to date	68	
<hr/>			
8. <b>Compute gross profit for current period</b>	Gross Profit to date	68	
	Previously recognized GP	<u>40</u>	
	Current year GP	28	
<hr/>			
	Revenue recognized (68% x 900) -	360	252
	Cost of Construction (68% x 800) -	320	<u>224</u>
	Gross Profit		28

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**Year 3 (current costs = \$256)**

5. <b>Compute gross profit of completed contract.</b>	Contract Price	\$900	
	Estimated total cost	<u>800</u>	
	Gross Profit	100	
<hr/>			
	Cost to date = 800		
6. <b>Compute % of completion.</b>	Total cost to date	= 800	= 100%
	Estimated total cost	= 800	
<hr/>			
7. <b>Compute gross profit to date</b>	Gross Profit	100	
	% of Completion	<u>100%</u>	
	Gross Profit to date	100	
<hr/>			
8. <b>Compute gross profit for current period</b>	Gross Profit to date	100	
	Previously recognized GP	<u>68</u>	
	Current year GP	32	
<hr/>			
	Revenue recognized (100% x 900) -	612	288
	Cost of Construction (100% x 800) -	544	<u>256</u>
	Gross Profit		32

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**Year 2 (Same facts of current costs = \$224, but the estimated total cost of contract has increased to \$850.)**

5a. <b>Compute gross profit of completed contract.</b>	Contract Price	\$900	
	Estimated total cost	<u>850</u>	
	Gross Profit	50	
<hr/>			
6a. <b>Compute % of completion.</b>	Total cost to date	= 544	= 64%
	Estimated total cost	= <u>850</u>	
<hr/>			
7a. <b>Compute gross profit to date</b>	Gross Profit	50	
	% of Completion	<u>64%</u>	
	Gross Profit to date	32	
<hr/>			
8a. <b>Compute gross profit for current period</b>	Gross Profit to date	32	
	Previously recognized GP	<u>40</u>	
	Current year GP (loss)	(8)	
<hr/>			
	Revenue recognized (64% x 900) -	360	216
	Cost of Construction (64% x <u>850</u> ) -	320	<u>224</u>
	Loss		(8)

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**Year 2 (Same facts of current costs = \$224, but the estimated total cost of contract has increased to \$920.)**

5. <b>Compute gross profit of completed contract.</b>	Contract Price	\$900
	Estimated total cost	<u>920</u>
	Gross Profit (Loss)	(20)

**Continue the construction project, but compute the loss for the entire contract and record.**

Gross Profit (loss) to date	(20)
Previously recognized GP	<u>40</u>
Current year GP (loss)	(60)

**Year 2 and 3 Remaining Revenue and COC:**

Revenue recognized (900 - 360)	540
Cost of Construction (920 - 320)	<u>600</u>
Loss	(60)

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**Year 2 (Same facts of current costs = \$224, but the estimated total cost of contract has increased to \$920.)**

5. <b>Compute gross profit of completed contract.</b>	Contract Price	\$900
	Estimated total cost	<u>920</u>
	Gross Profit (Loss)	(20)

6. <b>Compute % of completion.</b>	Total cost to date	= 544	= 59%
	Estimated total cost	= 920	

Revenue recognized (59% x 900 - 360)	171	
Year 1 Gross Profit (CIP)	40	} \$60 Loss
Total Contract Loss	<u>20</u>	
Cost of Construction	231	

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**Year 2 Journal Entry**

Cost of Construction	231
Construction in Progress	60
Revenue from LT Contracts	171

**Year 3 Journal Entry**

Revenue = \$900 - 360 - 171 = \$369  
 COC = \$920 - 320 - 231 = \$369

Cost of Construction	369
Revenue from LT Contracts	369

**Year 2 Journal Entry (Completed Contract Method)**

Loss on LT Contracts	20
Construction in Progress	20

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<b>Asset</b>	
Construction in Progress	150
Billings on CC	(130)
	<u>20</u>
<b>Liability</b>	
Billings on CC	130
Construction in Progress	(100)
	<u>30</u>

} Completed contract method (no gross profit until the end)

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<b>Completed Contract Method</b>	
Contract Price	\$900
Estimated total cost	<u>800</u>
Gross Profit	100
<b>Balances at the end of the third year:</b>	
Construction in Progress	Billings on CC
<u>800</u>	<u>900</u>

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<b>Cost of Construction</b>	<b>800</b>
<b>Construction in Progress</b>	<b>100</b>
<b>Revenue from LT Contracts</b>	<b>900</b>
<b>Billings on Constr Contract</b>	<b>900</b>
<b>Construction in Progress</b>	<b>900</b>
 or	
Cost of Construction	800
Construction in Progress	800
Billings on Constr Contract	900
Revenue from LT Contracts	900

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Contract price	\$10,000
Estimated total cost	8,000
Gross profit	2,000
First year costs	\$ 3,000
	$\frac{3,000}{8,000} = 37.5\%$
	$37.5\% \times \$2,000 = \$750$
	$37.5\% \times \$10,000 = \$3,750$
	$37.5\% \times \$8,000 = \$3,000$
Cost of Construction	3,000
Construction in Progress	750
Revenue from LT Contracts	3,750

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	Year 1	Year 2
Contract price	\$10,000	\$10,000
Estimated total cost	8,000	9,000
Gross profit	2,000	1,000
Year 1 costs	\$ 3,000	
Year 2 costs		\$ 2,400
Year 1 Gross Profit	\$ 750	
	$\frac{5,400}{9,000} = 60\% \times \$1,000 = \$600$ to date	
		$\$600 - \$750 = \$150$ loss in year 2
	750 Year 1	
Year 2 loss	150	600 Year 2

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### Revenue Recognition After POS

When there is extreme uncertainty as to collectibility.

**Installment Sales Method**  
 Recognizes revenue only when cash is received. The gross profit % determines which part of the cash receipt is gross profit and which part is recovery of cost.

$$\frac{\text{Gross Profit}}{\text{Sales}} = \text{Gross Profit \%}$$

- Durable goods, franchises, retail land sales with payments over time.
- Installment sales do not require the use of the installment sales method.
- Is collectibility reasonably assured, not the legal form of the transaction
- As cash is collected, the year of sale retains its original gross profit %.

**Cost Recovery Method**  
 Recognizes revenue only after total cost has been recovered. After recovery of cost, all cash receipts are recorded as revenue.

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1.	Installment Receivables	200	
	Installment Sales		200
	Cost of Installment Sales	150	
	Inventory		150
2.	Cash	60	
	Installment Receivables		60
3.	Installment Sales	200	
	Cost of Installment Sales	150	Close
	Deferred Gross Profit	50	
4.	Deferred Gross Profit	15	25%
	Realized Gross Profit		15
5.	Realized Gross Profit	15	Close
	Income Summary		15

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1.	Installment Receivables	200	
	<del>Installment Sales</del>		<del>200</del>
	<del>Cost of Installment Sales</del>	<del>150</del>	
	Inventory		150
3.	<del>Installment Sales</del>	<del>200</del>	
	<del>Cost of Installment Sales</del>	<del>150</del>	Close
	Deferred Gross Profit	50	
	Installment Receivables	200	
	Inventory		150
	Deferred Gross Profit		50

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<b>Income Statement</b>	
Sales (except installment sales)	xxxx
CGS (except installment CGS)	(xxxx)
Gross profit from sales	xxx
Add: Realized gross profit from installment sales	<u>15</u>
Total gross profit	xxx
or	
Installment Sales	200
Less: Deferred gross profit	(50)
Add: Realized gross profit	<u>15</u>
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Cost of installment sales	<u>(150)</u>
Gross profit	15

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**Balance Sheet**

Assets		Stockholders' Equity	
Cash	60	Capital stock	150
Installment receivables	140	Retained earnings	15
Less: Deferred gross profit	(35)		
Total Assets	165	Total SE	165

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Or a current liability equivalent to unearned revenue.

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**Franchises - ASC 952-605-25**

Granting of business rights by the franchisor to the franchisee. Franchisee pays an initial franchise fee and a continuing franchise fee.

Example: Happy Burger sells a franchise as follows:

Initial franchise fee: \$100,000  
 Cash down payment: \$30,000  
 7-year, 6% note payable in equal payments: \$70,000

Services: Locate site, negotiate purchase or lease of site, supervise construction, provide bookkeeping services, and train employees.

Assumption 1: Happy has substantially performed all services, the refund period has expired, and collectibility of the note is reasonably certain.

Cash	30,000		
Notes Receivable	70,000		
Franchise Fee Revenue		100,000	

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Assumption 2: Happy has **not** substantially performed all services, the refund period has expired, and collectibility of the note is reasonably certain.

Cash	30,000		
Notes Receivable	70,000		
Unearned Franchise Fee Revenue		100,000	

Assumption 3: Happy has substantially performed all services, the refund period has **not** expired, and collectibility of the note is reasonably certain.

Cash	30,000		
Notes Receivable	70,000		
Unearned Franchise Fee Revenue		100,000	

Assumption 4: Happy has substantially performed all services and the refund period has expired, but collectibility of the note is **not** reasonably certain.

Cash	30,000		
Notes Receivable	70,000		
Unearned Franchise Fee Revenue		70,000	
Franchise Fee Revenue		30,000	

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**Assumption 5:** Happy has **not** substantially performed all services, the refund period has expired, and there is **no** basis for estimating the collectibility of the note.

Cash	Deposit Method	30,000
Unearned Franchise Fee Revenue		30,000

**Assumption 6:** Happy has earned only \$40,000 from providing initial services. The balance is a down payment for continuing services. The refund period has expired and collectibility of the note is reasonably certain.

Cash	30,000
Notes Receivable	70,000
Unearned Franchise Fee Revenue	60,000
Franchise Fee Revenue	40,000

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- X sells to Y with a promise to repurchase.
- The inventory is delivered to a public warehouse, not to Y.
- Y uses the inventory as collateral to obtain a loan.
- Y gives the cash from the loan to X.
- X repurchases the inventory from Y at a higher price to cover Y's costs (loan, warehouse, etc.).

**Product Financing Arrangement**

Avoid personal property tax, obtain cash without new debt, or inflate sales.

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